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The Steelcase National Study of Office Environments: Do They Work?

Conducted by
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Preface.

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A. Introduction:

In April 1978, Steelcase Inc. commissioned the opinion research firm of Louis Harris and Associates, Inc. to conduct a pioneering study of the attitudes of office workers, corporate office planners and professional office designers toward the offices of today and tomorrow.

This volume presents the basic study findings from research conducted among a national cross-section of 1,047 office workers currently working full-time in offices of 25 or more employees, among 209 executives with responsibilities for office planning in major corporations*, and among 225 office design professionals.**

Each interview lasted approximately 45 minutes to one hour and was conducted in-person in the homes of the office workers and in the offices of the two executive groups by trained Louis Harris and Associates interviewers. The identity of the sponsor of the survey was not revealed during the course of the research. Anonymity of all respondents was guaranteed.

The content of this survey was developed by Louis Harris and Associates with the help and expertise of Steelcase staff members. Louis Harris and Associates was solely responsible for the questionnaire design, field work, analysis and observations in this report.

This report contains: a summary of findings, a detailed analysis of findings, summarized tabular results, and an appendix with methodological descriptions including explanations of the sample design and field methods.

B. Rationale and Objectives:

The growth of service industries in this country is well documented, and the growth of technology in the office to serve workers in these industries is nothing short of extraordinary. New office furniture and equipment have evolved for office spaces that serve the new technology, conserve energy, control paper flow, and, not least, meet the needs and preferences of the people who work in them.

Concepts such as the open plan and the systems approach to office planning are in a constant state of refinement, improvement and controversy. And while much of the debate has focused on the efficiency and economies of new office designs, issues such as privacy, individuality, communications between managers and employees, and employees' satisfaction, comfort, and pride in their place of work are also very much alive.

The spotlight of this survey is on how office workers feel about their offices, and how they feel their offices contribute to or detract from job satisfaction and productivity. The survey attempts to explore the *subjective* factors that contribute so much to people's attitudes toward their jobs, and serves as a starting point for further study of how the job satisfaction and performance of office workers can be enhanced by a well designed and well equipped workplace.

In looking at office workers' concerns about the changing nature of their jobs and the technology that serves their jobs, about what productivity means and what increased productivity would mean to them, about what in an office is felt to contribute to or hinder their job satisfaction and performance, and about what kind of a voice they should have in decisions about the workplace that affect their jobs, it is hoped that this survey will provide an effective guide for managers and design professionals in making decisions about office environments. Moreover, it is hoped that this survey, in outlining the differences in attitudes between executives with responsibility for office planning, office design professionals, and the working public, will increase and enhance the communications process that is so crucial to creating an office environment that meets the needs of the people working within it.

C. Content Areas:

To achieve these objectives, the survey explored attitudes of office workers in the following major areas:

- Job satisfaction and job criteria;
- Job performance and productivity, and particularly how the office is felt to contribute to these;
- Perceptions of and satisfaction with tools, equipment, tasks and workspaces;
- Participation in the office planning and design process; and
- Anticipation of changes on the job and in the workplace.

In addition, corporate office decision-makers and design professionals were asked about:

- Their overall criteria for office planning and design;
- Increased employee participation in the planning process; and
- Trends and issues in offices of the future.

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*Drawn from the Fortune 1300 list of major corporations.

**Drawn from membership lists of the American Institute of Architects and the American Society of Interior Designers representing firms engaged in contract office interior work. (Detailed sampling methodology can be found in the Appendix.)

D. Summary of major findings and implications.

1. Office workers give improved working conditions credit for having improved the quality of working life over the past ten years: While 58% of office workers feel that the quality of life in general in this country has improved over the past ten years, a greater 70% feel that way about the quality of working life. Improved working conditions, with a better office environment included, get equal billing with better wages and salaries as having contributed to the quality of working life. By 74-25%, office workers give their companies positive ratings for improving working conditions. And, while both women and men in the office cite improved physical conditions for having improved the quality of their working lives, women also feel that "better opportunities for women," "more jobs," and "equal opportunities for minorities" in the office have had a strong effect on their job satisfaction.

2. A majority of office workers recognize that their satisfaction with their office surroundings affects their job performance a great deal, and feel that doing their job well, in turn, is central to both job satisfaction and getting the things they most want out of life: A nearly unaminous 92% of office workers perceive a connection between their personal satisfaction with their office surroundings and their job performance, and 57% of these feel there is a great deal of a connection. A substantial 74% of office workers feel that they could do more work than they now do in a day, and most of these (43%) feel they could do more if the conditions and circumstances they work in were changed. The one measure that most office workers feel would have a positive effect on their personal productivity is the study and reorganization of work flow in the office, but ten of eleven measures tested in the survey are felt by office workers to have a potentially positive effect on their productivity. The only measure considered unlikely to have an effect on productivity is "changing office design so that employees, supervisors, and management are less closed off from one another."

3. Office workers are mobile, they have new office needs generated by the spread of electronic and data processing equipment to all areas of the office, and they need help in making sure that the less satisfying tasks of their jobs don't detract from their primary function — helping and serving people: In the past five years, 73% of office workers have experienced a change in the location of their personal workspaces, 73% have had to learn new skills on the job, 72% have acquired new duties or responsibilities, 57% have changed jobs within their organization, and 54% have seen their offices redesigned or given a new layout. A 54% majority use some kind of data processing, telecommunications or electric equipment on the job, and 45% have experienced the use of new electronic or data processing equipment on the job in the past five years. And, while most office workers single out "helping and serving people" as the most satisfying aspect of their jobs, less satisfying tasks such as taking instructions, sorting and filing, preparing and filling out documents are perceived to take up a good deal of their time.

4. Overall, office workers are satisfied with their office surroundings and their own personal workspaces, but for office workers who share their offices there is distinctly less satisfaction, and for workers in private or "conventional" offices there is more: A high 74% of office workers are now "very" or "somewhat" satisfied with their personal workspaces. A higher 81% who do not share their workspaces — in private offices — feel that way; a lower 68% who share their workspaces with one or more co-workers are satisfied with their workspace.

A 65% majority are satisfied with the way their organizations' offices overall contribute to their getting their jobs done well; a somewhat lower 57% approve of the way their offices look.

Overall, the way their personal workspaces look and work for them is important to 94%, and "very" important to close to half, of all office workers.

Office workers in "conventional" offices (identified by a drawing of a traditional office with rows of private offices flanked by secretarial stations) are somewhat more satisfied with their office surroundings than are those in "open plan" offices (with few or no walls or partitions, or with furniture-integrated partitioning), who, in turn, are considerably more positive than those in clerical "pool" offices (rows of desks with no separation between them).

The only consistently negative group are the office workers housed in pool offices, who describe their office environment as "just a place to work," "ordinary," "boring," "out of date," and "uncomfortable."

Office workers in open plan offices are more likely to think of their office environment as "functional," "modern," and "open." While their attitudes toward their offices on a whole range of characteristics — from neatness and organization, to how up-to-date they are, to color of partitions and use of plants — are more positive than those of pool office workers, and match the positive attitudes of workers in conventional offices, the open plan office seems not to be as satisfying as the conventional office in a number of ways. Office workers in conventional offices are much more likely to term their offices "friendly," "comfortable," "interesting," "suiting my personality," a "home away from home," and "impressive."

5. Privacy-related considerations are important to office workers and are, in general, the least satisfactory aspects of office workers' offices today: While overall, 65% of office workers are satisfied with the way their offices contribute to their getting their jobs done well, there are three functional aspects of the office that receive relatively low ratings — "ability to concentrate without noise and other distractions," "conversational privacy," and "visual privacy." Office workers who now have private offices rate them positively on these attributes, but still feel these aspects are the least satisfactory, while the majority of workers who share offices rate their offices negatively on these privacy-related dimensions.

Visual privacy is considerably less important to office workers than conversational privacy or ability to concentrate without noise and other distractions. Shelter from noise and distraction is equally important to all office workers in all types of jobs, but conversational privacy is more important to managerial and professional workers than to secretarial or clerical workers.

"Amount of privacy" and "amount of personal space" are as important to office workers as "style of office furniture" in considering what sets an executive office apart from other office areas, and they are also qualities that are important to office workers when they think of the way their personal workspaces look.

When asked what two or three aspects of their personal workspaces they would most like to change, most often mentioned by office workers are "more privacy" and "more space."

6. While, overall, corporate office decision-makers and office design professionals are remarkably accurate in their estimates of office workers' attitudes in relation to their office surroundings, they misjudge these priorities in a few key areas: Business executives, on average, estimate that office workers are by 66-19% satisfied with their personal workspaces; architects and interior designers estimate that a lower 48-33% of office workers are currently satisfied with personal workspaces. While both groups are correct in estimating that more office workers are now satisfied than not with their offices, the actual figures are much higher — 74-26%.

More dramatically, on the other side of the scale, majorities of both executive groups feel that the satisfaction of office workers with their surroundings has increased over the past five years. In fact, a 42% plurality of office workers feel that their satisfaction with their office environment has remained unchanged over the past five years, although a not insignificant 36% say their satisfaction has increased.

Both executive groups correctly estimate that the aspects of their offices that office workers feel are most important in relation to their job performance are "heat, air conditioning, and ventilation" and "ability to concentrate without noise or distraction." However, both executive groups somewhat underestimate the relatively high priority given to "access to tools, equipment and materials" and "conversational privacy."

In general, design professionals are too likely to discount "amount of privacy" as a relatively important characteristic in the way an office looks to office workers, and business executives are too likely to discount the "way it reflects the personality of the person working there." Both these executive groups accurately gauge "privacy," "personal space," and "style of office furniture" as the cluster of considerations most often chosen by office workers as setting executive offices apart from other areas.

7. Although office workers, corporate office decision-makers and design professionals agree that productivity is an important consideration in office planning, there are some differences in which measures or changes in the workplace are considered most likely to increase productivity: Both the business executives and the architects and interior designers interviewed agree, as do office workers, that there is a connection between office employees' satisfaction with their office surroundings and their job performance, and rank "desire to increase employee work output" as the third most important reason behind decisions to update office facilities. And the highest percentages of all three groups agree that "study and reorganization of office work so that it flows more smoothly" is the measure most likely to have a positive impact on productivity.

However, while a 54% majority of business executives and a slim 51% majority of design professionals feel that "changing office design so that employees, supervisors, and management are less closed off from one another" would improve productivity, only 29% of office workers feel this way.

And, while 54% of office workers feel that bonuses for no late or sick days would effectively increase productivity, only 35% of business executives and 41% of designers feel that way.

Higher percentages of business executives and design professionals than office workers feel that rearranging the office for traffic and communications, studying and providing proper office furniture for office workers, and cutting down on the amount of noise and distraction in the office would be effective productivity measures.

Business executives, however, are more likely than either design professionals or office workers to perceive investing in more electronic and data processing equipment as an effective productivity measure.

Finally, office workers put a relatively higher priority on profit-sharing as an impetus to their personal productivity than either executive group.

8. One measure that many office workers feel would effectively increase both their satisfaction with their office surroundings and their productivity — giving employees a greater say in office planning — meets with less than an enthusiastic response among office decision-makers: A 68% majority of designers, 63% of corporate office decision-makers and 61% of office workers agree that "giving employees a greater say in how their duties and personal work areas are organized" would increase productivity.

A 72% majority of office workers feel that their having a lot of say in the planning of office spaces and selection of the office equipment they use would have a beneficial effect on their office surroundings, and significant numbers volunteer that it would make their offices more comfortable and efficient, that they would feel more involved, and that they would be more productive.

A majority of office workers anticipate management opposition to their participation in office decision-making. But over 70% of office workers would fight management opposition for a more pleasant office environment, a safer office environment, better office furniture, and better tools and equipment. More office workers feel it is important for them to have a say in "recommending office furniture," "arranging office furniture," and "recommending tools and equipment" than now feel they have a say in these decisions.

Only 19% of office workers feel that employees now have a say in planning their organization's offices, but 36% feel they should have a say. A greater 42% feel that a committee representing different types of employees should have a say in the planning process as well.

However, although a strong 41% of design professionals agree that a representative committee should have a say, stronger majorities feel that designers outside a company (81%) or in-house (56%) should have a say.

An even less enthusiastic 24% of corporate office decision-makers feel that a joint committee of employees, supervisors and senior executives should be included in office planning, while only 27% feel employees should have a say (a greater 37% say employees in their organizations now have a voice). Much more acceptable to corporate office decision-makers is the traditional use of supervisors and department heads as a means of obtaining employee input. Majorities of corporate office decision-makers also feel that designers from outside their companies or in-house should have a voice.

9. Relatively few office workers are aware of the role architects and interior designers play in the planning of office spaces in their organizations, and many design professionals, in turn, feel that the communications they have with the users of the offices they plan are not adequate: According to the business executives interviewed in this study, 60% of their organizations retain outside professional design of planning consultants on some office planning projects, and 28% employ them on all or most projects. Moreover, 65% employ in-house design staff in office planning, and 20% feel that in-house design consultants have the most influence on a final office plan.

Despite the widespread influence of designers in the office planning process, less than a third of office workers are aware that outside design professionals have a role, and only a third are aware that in-house designers might be involved.

Further evidence of poor communications lies in the fact that one-half of design professionals feel that the input they receive from office workers is not adequate, and a frequently mentioned reason for this feeling is that "employees are not asked, they are not allowed to give their ideas, or they don't want to make waves." A 62% majority of design professionals who feel input is not now adequate want more direct contact with office employees.

10. Corporate office decision-makers and design professionals are in agreement about which office design issues will gain most in importance over the next ten years, and about what the most controversial issues will be ten years from now — energy conscious design and the open plan office: The five criteria behind development of specific plans that corporate office decision-makers and design professionals feel will gain most in importance over the next ten years are "suitability for electronic, telecommunications and data processing needs," "overall functioning," "effect on employee productivity," "energy efficiency," and "adaptability to changes in the work force."

Significantly, however, 12% of the designers volunteer that "employee acceptance," particularly of new designs, will be another increasingly important consideration.

Both executive groups agree that the most important issue today is "employee productivity," and over 60% feel this issue will gain in importance over the next ten years.

"Energy-conscious design," on the other hand, is not only likely to gain in importance but is also likely to be hotly debated.

Although majorities also see growing controversy in "democracy in the workplace" and "status differentiation in the office," only the debate over the "open plan vs. the traditional office" is felt by as many business executives and design professionals to have potential for being the hottest issue in 1988.

11. The open plan office concept affects approximately 3 in 10 office workers today, is likely to affect more in the future, and yet is little understood by office workers: While 39% of office workers identify the drawing of the conventional office as that which comes closest to describing the office area in which they usually work, a significant 30% single out one of three variations of an open plan office. The Fortune 1300 business executives interviewed on average say that 41% of their organizations' total office facilities are described by one form or another of the open plan; 47% of the design professionals' office projects in 1977, on average, are described by one of the three open plan variations.

Even more impressively, 87% of the business executives and 91% of the design professionals feel that more office buildings constructed over the next ten years will accommodate the open plan. A very convincing 77% of the business group and 84% of the design group feel that the open plan will become more prevalent than the conventional plan ten years from now.

The reasons for the growth of the open plan office are seen in its two strongest assets, as perceived by office decision-makers: "ability to change office layouts with a minimum of cost" and "ability to change office layouts with a minimum of dislocation." In general, architects and interior designers are more positive about the open plan than are corporate office planners, but 57% of the corporate executives and 75% of designers feel its benefits outweigh its disadvantages.

Chief among the open plan's disadvantages are "loss of status to people formerly in traditional private offices" and "loss of conversational privacy."

Most importantly, while 66% of corporate office planners and 87% of architects and designers are "very" familiar with the term "open plan," 61% of office workers are "not at all" familiar with it. A sizable 73% of the office workers who are familiar with the open plan correctly define it as "an open office area, no physical partitions, all working in a large space," but this represents only 26% of all office workers. Another 16% of the responses of this "familiar" group attach definitions related to "freedom of decision-making" in the office or to "democracy in the office."

And, although majorities of office workers feel that it is likely that over the next five years they will experience changes in the locations of their workspaces, the learning of new skills, and the use of electronic or data processing equipment, by 66-23% they do not feel that it is likely that they will change from a traditional to an open plan office.

12. Implications for office planners and designers, and for the office furniture industry: There is much good news in this study for office designers and planners and for the office furniture industry. The way their personal workspaces work and look is important to office workers, and, by and large, they are satisfied with them. They rate their office furniture positively, and pay attention to both the style of their office furniture and the materials of which it is made. Style of office furniture, in fact, is perceived to be as important in an executive office as is "amount of privacy" or "personal space."

Office workers as a group are a remarkably mobile, skilled group who are, by and large, interested in their work, which they perceive as helping and serving people. They have become accustomed to change on the job, learning new skills, changing jobs and office location, acquiring and using new equipment. The amount of change to which they have become adjusted over the past five years has given them a certain ability to accept changes in the next five years.

Moreover, office workers are remarkably attuned to the need for productivity in the office, and feel that any number of changes that might be instituted on their jobs would favorably affect their personal productivity. They agree that their satisfaction with their office surroundings greatly affects their job performance, and, in turn, that their job performance affects how they feel at the end of a working day.

However, office workers are also strongly attuned to a need for territoriality in the office — for having conversational privacy, a shelter from noise and distraction, more personal space, and a "home away from home." Those office workers who share office spaces — open plan office workers among them — are less satisfied with these aspects of their offices.

Nor have workers been given the voice in office decision-making they would like. A strong plurality feel that a representative committee of employees should have a say in office planning, more than feel all employees should have a say, but less than 20% feel that employees are now given a say or that they are consulted through representatives.

Convincing majorities of office workers feel their having a voice in office planning would improve their office surroundings, and majorities are ready to go against management opposition for a more pleasant, safer and better equipped office.

Given the fact that so few office workers now perceive that they have a voice in office planning, it is not too surprising that they are not familiar with the term "open plan," or of the role design professionals play in planning the office spaces where they work. And despite the fact that energy consciousness is high among the public, only a relatively small percentage of office workers are aware of any changes made in their offices to save energy.

There is, in effect, a collision course indicated here — too little consultation with office workers affected by change, too much avoidance of the privacy issue by office decision-makers, too little understanding by office workers of the reasons office decision-makers feel the open plan office has important advantages over a conventional plan office, and too little dialogue between office workers and office decision-makers about potential drawbacks.

Increased employee participation in the office planning process would clearly go a long way toward alleviating the intensity of the collision. Unfortunately, unless employees come to feel truly involved in the decisions that most affect their office environment, this aspect of democracy in the workplace might become another "hot" issue over the next ten years rather than a tool for solving a communications problem, with the stake being productivity in the workplace.

Chapter I

The Setting: Office workers and their jobs.

A. Objectives:

The purpose of this chapter is to identify who office workers are; to examine how they feel about their jobs and their employers; to assess which aspects of their jobs are most important to them; how important to them the physical environment of the office may be within the spectrum of job considerations; and how these views vary among different groups of office workers.

To this end, a number of questions were asked, ranging from overall questions about the quality of working life, to ratings of workers' present employers on a variety of dimensions, to specific problems met with on the job. Differences in attitudes among men and women; managerial, supervisory and regular workers; managers, professionals, clerical and secretarial workers; younger and older office workers, and workers in various types of organizations were examined in these questions.

B. Summary:

A majority of office workers feel that the quality of life in this country has improved over the past ten years, and an even greater majority feel that way about the direction of the quality of working life.

Improved working conditions get equal billing with better wages and salaries as the changes most responsible for improving the quality of working life, according to office workers. Another change responsible for women office workers' positive attitude toward their working lives is the perception that opportunities for jobs, for advancement and for better pay have improved for women in the office.

Office workers feel very favorably toward their employers — especially in terms of providing steady jobs and being concerned about employee safety — but majorities approve of their employers on all of ten measures tested. A substantial 82% of office workers are satisfied with their jobs, and a 42% plurality are "very" satisfied with their work.

An almost unanimous 96% of office workers feel that "the people I work with are friendly and helpful," and equally strong majorities feel "I make a real contribution to the total work turned out by my work unit," "I am clear about the scope and responsibilities of my job," and "I have access to tools, equipment, and materials I need to get the job done well" — all job attributes that are given high priorities by office workers when they consider a job. In total, on 13 of 19 possible job attributes, office workers feel that their current jobs come close to or meet their expectations for employment.

The greatest gap between office workers' priorities in job considerations and how well their current jobs fill these expectations is on the question of feeling "like an individual on the job, not just a cog in a machine," by 85-14% office workers feel the latter is true in their current job.

Three aspects of working conditions directly affected by office design and planning were tested in the list of 19 possible job attributes, and "access to tools, equipment and materials needed to get the job done well" is given the highest priority as a job consideration — more important than friendly co-workers, competent supervision, and pay and benefits.

Much farther down the list in priority are "work surface, chair, storage space, and other office furniture" and "pleasant physical surroundings in the office," clearly considered apart from "tools and equipment" and not as essential job considerations. However, 85% and 86% of office workers, respectively, consider them important job considerations.

Clerical and "regular" workers feel more strongly than executive, professional and management-level office employees that office furniture and office surroundings are important, but all levels of office workers place a high priority on "tools, equipment, and materials".

A very substantial 93% of office workers feel they have "access to needed tools, equipment and materials"; 86% agree that their office furniture is what they need to get their jobs done well; and 81% feel that their office surroundings are pleasant.

Perception of the quality of life over the past ten years.

A majority of office workers feel that the quality of life in this country has improved over the past ten years, and an even greater majority feel that way about the direction of the quality of working life in this country. More women office workers feel positively about the quality of working life than do their male counterparts.

Table I-1

Q.1a: All in all, compared to ten years ago, do you feel the quality of life in this country has improved, grown worse, or stayed about the same?

(Number of respondents)	Total Office Workers (1047)
	%
Improved	58
Grown worse	25
Stayed the same	16
Not sure	1

Perception of quality of working life over past ten years.

The primary reasons office workers give for seeing improvements in working life in the past decade are "overall working conditions have improved, and there is a better office environment, e.g., lighting and air conditioning" and "better wages and higher salaries." A somewhat smaller percentage of office workers cite improvements in benefits such as vacations, sick leave, insurance, profit sharing and pensions.

Employees of business and professional services and in health and education mention improvements in working conditions somewhat more often than do other office workers; those in business and professional services, in government, and in communications or public services evidently have also benefited more from improved equipment and mechanization.

A high 24% of women managers, 32% of supervisors, and 28% of women who work at "regular" level jobs volunteer that "better opportunities for women" have improved working life over the past ten years.

Table I-2

Q.1b: How about the quality of working life in this country — compared to 10 years ago, do you feel working life has improved, grown worse, or stayed about the same?

		Sex	
(Number of respondents)	Total (1047)	Male (458)	Female (589)
	%	%	%
Improved	70	67	72
Grown worse	12	13	11
Stayed the same	15	16	14
Not sure	4	4	4

Primary reasons for perception of the quality of working life over past ten years.

Table I-3

Q.1c: What has happened over the past 10 years to make working life better/worse? (Base: Quality of working life improved or grown worse in Q.1b)

	Job Level										Industry						
		Management			Supervisory			Regular Worker									
(Number of respondents)	Total (854)	Total (188)	Male (142)	Female (46)	Total (168)	Male (83)	Female (85)	Total (480)	Male (135)	Female (345)	Manufacturing (156)	Government (145)	Health and Education (108)	Communications and Public Services (78)	Business and Professional Services (72)	Insurance and Real Estate (65)	Banking and Investments (58)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Better																	
Overall working conditions have improved, better environment (lighting, air conditioning, etc.)	27	28	27	28	27	31	22	28	28	27	22	20	34	22	43	28	24
Better salaries, wages, pay	27	22	21	24	26	23	29	29	23	31	21	24	21	32	25	35	26
Benefits have improved (e.g., vacations, sick leave, insurance, profit sharing, pensions, etc.)	21	18	19	13	18	17	19	24	27	23	23	16	22	19	18	26	29
Better opportunities for women (e.g., pay, position, advancements, etc.)	18	8	3	24	17	2	32	22	6	28	15	19	19	18	18	23	16
Better/improved machinery, equipment; more mechanization, less physical labor	17	23	27	13	17	18	15	15	17	14	16	21	14	21	31	15	14
Better employer/employee relationships; more understanding of employee's needs/welfare	16	21	20	24	19	23	15	14	18	12	20	13	11	15	19	18	29
More jobs, less unemployment	10	7	6	13	11	11	12	11	8	13	7	12	9	12	11	6	22
Shorter work week/hours	9	13	15	9	10	11	9	6	5	7	6	10	7	13	8	9	5
Equal rights have helped minorities to get better jobs	7	5	4	7	5	1	9	9	5	10	5	9	5	9	10	6	10

Observation:

The fact that improved working conditions get equal billing with better wages and salaries is an indication that changes made in the office environment over the past ten years have not gone unnoticed or unappreciated by the office public, a not insignificant finding.

Office workers' ratings of employers.

The employers of office workers receive extremely positive ratings from their employees on all ten dimensions tested in the study, but are seen most positively for "providing steady jobs for people" and "being concerned about employee safety," two relatively non-controversial dimensions. "Talking honestly and directly to employees," perhaps the most controversial, receives the lowest, but still positive, rating.

Younger workers tend to give their employers slightly lower ratings and older workers slightly higher ratings on each of the dimensions, with this difference most striking on the dimensions of "being concerned about employee safety," "providing jobs for blacks and other minorities," "being progressive and forward-thinking," helping to improve the quality of life," "helping young people to get ahead," and "talking honestly and directly to employees."

Similar differences occur across job levels, with management-level office workers considerably more positive than regular workers on a number of dimensions including "employee safety," "jobs for blacks and other minorities," "improving working conditions for employees," "enabling employees to fully use their talents," and "talking honestly and directly to their employees."

While male managers are the most enthusiastic group about the contributions their companies have made to giving women equal opportunities to move ahead, women office workers overall feel as positively as do men about the way their own companies have moved toward affirmative action for women, another strikingly positive finding in this area.

"Improving working conditions for its employees" is seventh of the ten dimensions in its positive rating. A substantial 74-25% majority of office workers feel that their companies have done an excellent or pretty good job in improving working conditions.

Table I-4

Q.2c: How would you rate the job your company or organization is doing on (ITEM) — excellent, pretty good, only fair, or poor?

		Age			Job Level								
					Management			Supervisory			Regular Worker		
(Number of respondents)	Total (1047)	18-29 (351)	30-39 (308)	40 and Over (386)	Total (221)	Male (166)	Female (55)	Total (205)	Male (103)	Female (102)	Total (597)	Male (175)	Female (422)
	%	%	%	%	%	%	%	%	%	%	%	%	%
Providing enough steady jobs for people													
Positive	85	85	83	85	87	89	82	85	86	84	83	83	84
Negative	13	12	14	13	9	8	13	11	12	11	15	15	15
Being concerned about employee safety													
Positive	84	80	83	88	90	89	93	78	83	72	84	82	84
Negative	15	19	15	11	9	10	7	20	16	25	15	16	15
Providing jobs for blacks and other minorities													
Positive	81	72	83	87	85	86	84	84	84	84	78	75	79
Negative	17	25	15	11	12	11	13	14	14	15	19	22	18
Giving women an equal opportunity to move ahead in the organization													
Positive	76	73	77	78	81	82	78	75	74	76	75	75	74
Negative	23	25	22	21	18	17	20	22	22	23	25	23	25
Being a progressive, forward-thinking organization													
Positive	76	72	74	80	81	80	84	70	67	74	76	71	77
Negative	24	27	25	20	19	20	13	29	32	26	24	28	22
Helping to improve the quality of life													
Positive	75	71	74	80	80	79	84	76	79	74	74	75	73
Negative	22	26	23	18	19	20	16	21	20	22	23	23	23
Improving working conditions for its employees													
Positive	74	72	73	77	81	82	80	68	72	64	74	71	74
Negative	25	27	26	22	18	18	18	31	26	35	26	28	25
Helping young people to get ahead													
Positive	73	70	71	77	76	74	82	73	71	75	72	71	72
Negative	26	28	28	22	22	25	13	25	29	22	27	28	27
Enabling employees to fully use their talents													
Positive	66	63	65	69	72	73	69	64	65	63	64	63	64
Negative	34	36	35	30	27	27	27	36	35	36	36	36	35
Talking honestly and directly to its employees													
Positive	60	56	58	65	67	69	62	55	57	53	59	53	62
Negative	39	43	42	34	31	29	36	44	42	46	40	47	37

Job Satisfaction.

A very high 42% of office workers are "very" satisfied with their jobs; an additional 40% are "somewhat" satisfied.

Job satisfaction, however, is lowest among younger workers 18-29 years of age (33% "very" satisfied), among clerical workers (35% "very" satisfied), and among workers who classify themselves as regular workers (38% "very" satisfied).

Job satisfaction is highest among office workers who consider themselves to be part of management — a 54% majority are "very" satisfied with their jobs — and among office workers aged 40 and over.

Table I-5

Q.2g: All in all, how satisfied would you say you are now in your job — very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?

		Age			Sex		Length Of Employment		Job Type				Job Level		
(Number of respondents)	Total (1047)	18-29 (351)	30-39 (308)	40 and Over (386)	Male (458)	Female (589)	Less Than 6 Years (559)	6 Years Or More (442)	Executive/ Manager/ Supervisor (245)	Professional (319)	Secretarial (121)	Clerical (274)	Management (221)	Supervisory (205)	Regular Worker (597)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Very satisfied	42	33	44	48	43	41	38	46	47	44	40	35	54	41	38
Somewhat satisfied	40	42	40	39	41	40	42	39	37	39	44	44	35	43	41
Somewhat dissatisfied	13	18	13	10	12	15	15	12	12	12	13	16	10	11	16
Very dissatisfied	4	6	3	3	3	5	5	3	3	5	2	4	1	3	5
Not sure/no answer	-	-	-	-	1	-	-	-	1	-	-	-	-	1	-
Positive	82	75	84	87	84	81	80	85	84	83	84	79	90	84	79
Negative	17	24	16	12	15	19	20	15	15	17	16	20	10	15	21

What is important in considering a job?

One way of looking for reasons for office workers' satisfaction with their jobs is to look at what is most important to them in a job, and to contrast this with whether or not these attributes describe their present position.

The most important aspects of jobs to office workers are (in descending rank order):

- Clarity of scope and responsibilities of the job;
- Access of tools, equipment, and materials needed to get the job done well;
- Interesting work;
- Feeling that a personal contribution is being made to the total work unit;
- Friendly and helpful co-workers;
- Challenging work;
- Feeling like an individual on the job, and not just a cog in a machine.

Among the job attributes that meet office workers' expectations are three aspects of working conditions which should be of particular interest to office planners and designers:

- The first, of course, is "access to tools, equipment, and materials needed on the job." The high priority placed on this by office workers — 85% feel this is very important — should be highlighted. It is ranked 2nd in importance, and 3rd in describing jobs today.
- Much farther down the list in priority is "work surface, chair, storage space, and other office furniture" needed on the job. Office furniture is a low 14th in priority. More office workers feel they have very adequate office furniture (50%) than feel it is very important to them (45%).
- Lastly, "pleasant physical surroundings in the office" are near last priority, very important to only 37% of office workers. A larger plurality (42%) find that pleasant office surroundings are very characteristic of their present jobs, 39% find them somewhat characteristic and 19% find them not too true or not at all true of their current jobs.

The group of office workers tending to find that these physical aspects of their working conditions are characteristic of their jobs — that they have access to proper tools and equipment, that their office furniture is what they need, and that the physical surroundings in their offices are pleasant — are secretaries, who also tend to place a higher priority than do other office workers on the pleasantness of their surroundings.

What is important in considering a job.

Table I-6

Q.2a: The next question involves things a person may or may not look for in a job. I am going to read you some things other people have told us they look for when they consider a job. People differ a lot in terms of which things are more important to them. We'd like you to say how important each item I read is for you, using the answer categories listed on the card. Would you say each item would be very important to you, somewhat important, not too important, or not at all important when you consider a job?

(Number of respondents: 1047)	Very Important	Somewhat Important	Not too Important	Not At All Important	Score*	Rank
	%	%	%	%	#	#
I am clear about the scope and responsibilities of my job	87	12	1	–	95	1
The work is interesting	83	16	1	–	93	2
I have access to tools, equipment, and materials I need to get the job done well	85	12	2	–	93	2
I feel I make a real contribution to the total work turned out by my work unit	79	18	2	–	91	4
I feel like an individual on the job, not just a cog in a machine	77	19	3	–	90	5
My job is challenging	75	22	2	–	90	5
The people I work with are friendly and helpful	74	22	3	–	90	5
My supervisor is competent is doing his/her job	76	21	3	–	89	8
The pay is good	65	32	3	–	87	9
I am given a lot of freedom to decide how I do my own work	65	30	4	–	86	10
The employee benefits — such as insurance and vacations — are good	64	32	3	1	86	10
There are ample opportunities for me to move up to a better position in my company	66	27	5	2	85	12
My immediate boss really cares about my needs on the job	62	31	5	1	84	13
The hours are good	48	37	13	2	76	14
The work surface, chair, storage space, and other office furniture are what I need to get the job done well	45	40	14	1	76	14
When I do a good job, I'm praised for it	44	40	14	2	74	16
The physical surroundings in the office are pleasant	37	49	13	1	73	17
The location of the company is good	39	43	15	3	72	18
I can do what's required of me in my job and then relax	47	29	18	6	71	19

*Scoring values: Very important = 100, somewhat important = 67, not too important = 33, not at all important = 0. The scores were calculated as follows: number of respondents answering each category times the scoring value, divided by respondents. Those answering "not sure" have been eliminated.

What is true of present job.

Table I-7

Q.2b: Would you tell me how true you feel each of these items is of the job you have at the moment. Please use the answer categories listed on the card. Would you say each item is very true of your present job, somewhat true, not too true, or not true at all? If an item simply does not apply to your job, if for instance you don't work with other people at all, please point this out.

(Number of respondents: 1047)	Very True	Somewhat True	Not too True	Not True At All	Not Applicable	Score*	Rank
	%	%	%	%	%	#	#
I feel I make a real contribution to the total work turned out by my work unit	69	25	4	1	1	87	1
I am clear about the scope and responsibilities of my job	68	26	4	1	–	87	1
The people I work with are friendly and helpful	62	34	3	1	–	85	3
I have access to tools, equipment, and materials I need to get the job done well	63	30	5	1	1	85	3
The work is interesting	63	28	7	2	–	84	5
The employee benefits — such as insurance and vacation — are good	63	27	6	3	1	83	6
The hours are good	62	27	8	3	–	82	7
The location of the company is good	60	27	8	4	–	81	8
My job is challenging	60	27	9	4	–	80	9
I feel like an individual on the job, not just a cog in a machine	56	29	10	4	–	79	10
I am given a lot of freedom to decide how I do my own work	56	29	9	5	–	79	10
My supervisor is competent in doing his/her job	54	31	9	5	2	77	12
My work surface, chair, storage space, and other office furniture are what I need to get the job done well	50	36	10	4	–	77	12
The pay is good	41	44	11	4	–	74	14
My immediate boss really cares about my needs on the job	45	38	10	5	1	74	14
The physical surroundings in the office are pleasant	42	39	12	7	–	72	16
I can do what's required of me in my job and then relax	36	36	15	12	1	65	17
When I do a good job, I'm praised for it	29	42	19	9	1	63	18
There are ample opportunities for me to move up to a better position in my company	28	34	23	13	2	58	19

*Scoring values: Very true = 100, Somewhat true = 67, Not too true = 33, Not true at all = 0

Scoring: Number of respondents answering each category times the scoring value, added and divided by total number respondents. ("Not applicable" omitted from scoring.) Those answering "not sure" have been eliminated.

Extent to which various considerations are true of present jobs for different types of office workers (scores).*

Table I-8

		Job Type				Job Level		
	Total	Executive/ Manager Supervisor	Profes-sional	Secre-tarial	Cler-ical	Manage-ment	Super-visory	Regular Worker
I feel I make a real contribution to the total work turned out by my work unit	87	90	85	87	87	91	89	85
I am clear about the scope and responsibilities of my job	87	88	83	90	88	87	87	86
The people I work with are friendly and helpful	85	87	84	88	85	86	86	85
I have access to tools, equipment and materials I need to get the job done well	85	85	81	90	86	86	82	85
The work is interesting	84	89	86	80	78	93	85	80
The employee benefits — such as insurance and vacation — are good	83	86	80	85	84	84	82	84
The hours are good	82	78	79	87	85	76	80	84
The location of the company is good	81	77	80	86	84	79	77	83
My job is challenging	80	89	84	74	73	91	84	75
I feel like an individual on the job, not just a cog in a machine	79	84	79	79	75	88	81	75
I am given a lot of freedom to decide how I do my own work	79	85	80	77	72	89	84	73
My supervisor is competent in doing his/her job	77	78	75	83	76	79	76	77
My work surface, chair, storage space, and other furniture are what I need to get the job done well	77	79	74	83	77	82	71	77
The pay is good	74	78	75	73	69	83	69	72
My immediate boss really cares about my needs on the job	74	75	69	78	75	74	73	74
The physical surroundings in the office are pleasant	72	74	70	74	72	78	67	71
I can do what's required of me in my job and then relax	65	60	64	71	66	63	66	65
When I do a good job, I'm praised for it	63	64	61	72	60	66	62	62
There are ample opportunities for me to move up to a better position in my company	58	62	56	55	57	60	59	56

*Scoring: Very true = 100, Somewhat true = 67, Not too true = 33, Not sure = 0.

What different types of office workers look for in a job (scores).[*]

Table I-9

		Job Type				Job Level		
	Total	Executive/ Manager/ Supervisor	Profes-sional	Secre-tarial	Cler-ical	Manage-ment	Super-visory	Regular Worker
Intrinsic Aspects								
I am clear about the scope and responsibilities of my job	95	95	93	98	95	94	95	97
The work is interesting	93	95	94	92	91	94	94	93
I feel I make a real contribution to the total work turned out by my work unit	91	93	88	94	91	93	91	91
I feel like an individual on the job, not just a cog in a machine	90	90	91	92	90	91	90	91
My job is challenging	90	92	92	88	86	93	91	88
I am given a lot of freedom to decide how I do my own work	86	90	86	86	81	90	88	83
There are ample opportunities for me to move up to a better position in my company	85	87	84	84	83	86	86	84
Extrinsic Aspects								
I have access to tools, equipment, and materials I need to get the job done well	93	94	92	94	95	93	93	94
The people I work with are friendly and helpful	90	89	87	92	92	87	87	91
My supervisor is competent in doing his/her job	89	90	85	92	91	87	90	91
The pay is good	87	86	85	90	87	85	86	87
The employee benefits — such as insurance and vacation — are good	86	84	81	92	90	83	85	88
My immediate boss really cares about my needs on the job	84	85	80	88	85	79	83	86
The hours are good	77	71	70	87	83	68	72	81
My work surface, chair, storage space, and other furniture are what I need to get the job done well	76	75	70	73	79	72	73	78
When I do a good job, I'm praised for it	74	75	70	80	75	72	74	76
The physical surroundings in the office are pleasant	73	73	68	79	76	70	70	75
The location of the company is good	72	70	67	79	77	66	70	75
I can do what's required of me in my job and then relax	71	68	67	77	78	67	70	74

[*] Scoring: Very important in a job = 100, Somewhat important = 67, Not too important = 33, Not at all important = 0.

Chapter II

Office workers' views of office productivity.

A. Objectives:

A central concern of the office equipment and furniture industries, professional office planners, designers and corporate executives who design and equip offices is the extent to which their decision-making will contribute to productivity in the office. None of their decisions, however, are likely to have any impact on productivity unless office workers themselves perceive that productivity increases are possible, needed and beneficial. This part of the survey, therefore, was designed to test office workers' attitudes toward job productivity.

B. Summary:

Overall, a majority of office workers do recognize that their office surroundings affect their jobs a great deal, and that doing their jobs well, in turn, is central to both job satisfaction and to getting the things they most want out of life.

Office workers feel that despite the fact that management and stockholders of an organization would benefit most from increased productivity, they themselves would get satisfaction out of producing more in a day than they do now, and that they hold some responsibility to do so. Moreover, 74% feel that they could do more in a day than they do now, although 43% of office workers would feel that was only if the conditions and circumstances under which they work were changed.

There is no doubt that many changes instituted in an office to increase productivity would be understood by most office workers, and would be met with success. The one change that would be most acceptable and effective is one which can and should be part of the office planning process (although it goes beyond the immediate focus of physical design) — the reorganization of tasks done on the job so that "the work goes more smoothly from person to person and from department to department."

Of the other ten possible changes tested, six directly involve properly planning and equipping an office. Profit-sharing would be considered by more employees as an effective incentive than these changes in the physical aspects of the office, but majorities of office workers accept that five of these six measures would, indeed, increase productivity.

Especially important to office planners and designers is the recognition by office workers that cutting down on noise and distraction is important to productivity in the office, and that having work surfaces, chairs, lighting and storage space suited to the task at hand would be beneficial. And, as will be emphasized when this report discusses how employees feel about participating in office design, a substantial majority feel that "giving employees a greater say in how their duties and personal work areas are organized" would make them more productive.

On the negative side, a physical change for which the argument is made that employees, supervisors, and executive staff will be less cut off from one another is likely to meet with skepticism if it is done in the name of increased productivity.

Who benefits from increased productivity?

Increased productivity was defined for the office workers in this survey as "taking place when the same number of people are able to produce more than they used to during the same time period. This may be because their work conditions have improved, because they have been given better equipment, or because they are more conscientious in their work."

A substantial 73% majority of office workers feel that management would benefit a lot from increased productivity, as opposed to 44% who feel employees would benefit a great deal. Moreover, fewer office workers at all levels — management, supervisory, and regular workers — believe that employees would benefit a great deal from increased productivity than believe stockholders or management would benefit.

However, a majority of office workers believe that the country as a whole would benefit a great deal from increased productivity, and 50% feel that consumers would gain.

Table II-1

Q.3a: As you may know, increased productivity takes place when the same number of people are able to produce more than they used to during the same time period. This may be because their work conditions have improved, because they have been given better equipment, or because they are more conscientious in their work. In general, how much would you say (ITEM) benefit(s) from increased productivity — a lot, only some, or not at all?

		Job Level		
(Number of respondents)	**Total (1047)**	**Management (221)**	**Supervisory (205)**	**Regular Worker (597)**
	%	%	%	%
Management				
A lot	73	71	71	74
Only some	22	25	22	20
Not at all	3	2	4	3
Not sure/no answer	3	1	3	3
Stockholders				
A lot	63	63	58	65
Only some	18	20	21	16
Not at all	5	5	8	5
Not sure/no answer	14	12	13	15
Country as a whole				
A lot	54	52	54	55
Only someone	33	38	34	31
Not at all	6	7	6	6
Not sure/no answer	7	3	6	8
Consumers				
A lot	50	50	45	52
Only some	32	34	34	30
Not at all	11	10	10	11
Not sure/no answer	8	5	10	7
Employees				
A lot	44	49	38	44
Only some	41	40	50	38
Not at all	12	7	10	15
Not sure/no answer	3	4	2	3

Who should be responsible for increasing productivity?

A 40% plurality of office workers feel that employees hold the responsibility for increasing productivity in an organization, as compared with 27% who feel supervisors or department heads should hold the most responsibility, and 11% who feel senior executives should do so. Another 18% feel that all of these hold responsibility. A slightly greater 16% of management-level employees feel senior executives hold the most responsibility, 20% of supervisory-level employees feel supervisors or department heads hold most of the responsibility, and 41% of regular workers feel all employees hold the most responsibility.

Table II-2

Q.3b: Who do you feel should have the most responsibility for increasing productivity in an organization — the senior executives, the supervisors and department heads, or all the employees?

		Job Level		
(Number of respondents)	**Total (1047)**	**Management (221)**	**Supervisory (205)**	**Regular Worker (597)**
	%	%	%	%
Senior executives	11	16	10	10
Supervisors and department heads	27	29	20	27
All the employees	40	38	41	41
All the above (vol)	18	16	17	19
None	-	-	-	-
Not sure/no answer	3	1	2	3

Benefits/drawbacks to increased productivity.

An even more convincing explanation of why office workers would be willing to shoulder responsibility for increased productivity in the office lies in their perceptions of how increased productivity would affect them.

First, and primary to the motivations of office workers, is the fact that a 62% majority of office workers perceive that doing their jobs well affects their getting the things they most want out of life. Management-level employees feel a greater connection between doing their jobs well and getting what they want out of life (70% see a great deal of connection) than do regular workers, but a solid 60% of non-management office workers still believe that doing a good job is central to their lives.

Moreover, a solid 73% majority of office workers feel that if working conditions were changed so that they could produce more in a day than they do now, they would "feel better about their jobs at the end of the day," and office workers at every job level feel that way.

Of four other possible beneficial consequences of their own improved productivity, majorities of office workers feel that three are likely:

- "More recognition for doing a good job," 69-29% likely;
- "Opportunity for promotion," 60-38% likely; and
- "Pay increase," 52-45% likely.

Table II-3

Q.1d: In general, how much of a connection do you think there is between doing your job well and getting the things you most want out of life? Do you think doing your job well affects your getting the things you most want out of life a great deal, only some, or hardly at all?

		Job Level		
(Number of respondents)	**Total (1047)**	**Management (221)**	**Supervisory (205)**	**Regular Worker (597)**
	%	%	%	%
Great deal	62	70	61	60
Only some	27	23	29	28
Hardly at all	9	5	8	11
Not sure/no answer	1	2	1	1

Perceived effects of increased productivity.

Table II-4

Q.3f: I'm going to read you some things people have told us they felt might happen if their working conditions were changed so that they and their work colleagues were able to accomplish more on the job in a day. How likely do you feel it would be that (ITEM) if working conditions were changed so you were able to produce more in a day — very likely, somewhat likely, hardly likely, or not at all likely?

		Job Level								
		Management			Supervisory			Regular Workers		
(Number of respondents)	Total (1047)	Total (221)	Male (166)	Female (55)	Total (205)	Male (103)	Female (102)	Total (597)	Male (175)	Female (422)
You'd feel better about your job at the end of the day	%	%	%	%	%	%	%	%	%	%
Likely	73	80	81	78	75	75	75	71	87	65
Not likely	22	16	16	16	21	20	23	24	10	30
You would get more recognition for doing a good job										
Likely	69	72	72	73	69	73	65	68	73	65
Not likely	29	26	26	25	29	25	33	31	26	33
The company but not the employees would benefit										
Likely	62	61	61	60	62	58	66	63	62	64
Not likely	34	36	36	35	34	39	29	34	35	33
You would have an opportunity for promotion										
Likely	60	63	64	60	62	63	61	58	59	57
Not likely	38	34	34	36	36	35	37	39	39	40
You'd just be doing more work for the same pay										
Likely	59	51	49	55	60	60	61	62	64	61
Not likely	37	44	45	42	36	35	36	34	33	35
Your pay would increase										
Likely	52	52	55	44	52	54	49	52	53	51
Not likely	45	46	43	55	46	44	48	46	45	46
You would feel too much pressure on the job										
Likely	45	30	30	29	44	38	51	51	50	52
Not likely	52	68	67	69	53	6[illegible]	45	46	47	45
Employees would share in increased company profits										
Likely	43	43	45	38	40	43	36	44	39	45
Not likely	48	43	43	44	50	48	53	50	53	49
Some employees would get laid off										
Likely	31	24	21	35	32	29	35	33	28	36
Not likely	63	70	73	58	62	66	59	60	69	57

Observation:

Office workers, clearly, are unconvinced that the major benefits of increased productivity come to employees. In fact, some office workers fear that they would suffer from undue pressure on the job if productivity measures were introduced, and almost all office workers, with the exception of male managers, are skeptical that they would benefit financially from personally increasing their productivity.

Perception of personal productivity. A 42% plurality of office workers now feel that they "certainly" do as much work as they can, and an additional 22% feel that they "probably" do as much as they can.

However, when pressed with, "if the conditions and circumstances you work in were changed," an additional 43% of office workers say they certainly could do more work in a day, resulting in a total of 74% of all office workers who feel they could increase productivity — 67% of management-level office workers, 71% of supervisors, and 77% of regular workers.

Perception of personal productivity.

Table II-5

Q.3c: Being honest with yourself, do you feel you and your work colleagues certainly do as much work as you reasonably can, probably do as much as you can, or do you ever feel you could probably do more work?

		Job Level		
(Number of respondents)	Total (1047)	Management (221)	Supervisory (205)	Regular Worker (597)
	%	%	%	%
Certainly do as much as can	42	36	43	43
Probably do as much as can	22	24	23	22
Could probably do more	34	39	32	32
Not sure/no answer	2	-	2	3

Perception of personal productivity if conditions and circumstances of work were changed.

Q.3d: Well, if the conditions and circumstances you work in were changed, then do you think you could certainly do more work in a day than you do now, or not?

		Job Level		
(Number of respondents)	Total (1047)	Management (221)	Supervisory (205)	Regular Worker (597)
	%	%	%	%
Could do more	74	67	71	77
Could not	23	32	25	19
Not sure/no answer	3	1	4	4

Obstacles to doing the job well. Office workers feel that having too much to do, and not having enough time to do the job properly are their two most common problems on the job. This is true for all three basic job levels — management, supervisory, and regular workers.

"Being unclear on just what the scope and responsibilities of the job are," "being unsure how well you are doing on the job," and "not getting good enough instructions and information from a supervisor to do the job well" occur occasionally.

Less frequent feelings are that "work surface, chair, storage space, and other office furniture are out of date or not suitable for the job" and that "tools, equipment, and materials you have to work with are out of date or not suitable for the job." Important for office planners and designers to note, however, is that supervisory level workers feel more often than do either management or regular workers that their office furniture and tools, equipment and materials are not suitable for getting their jobs done well.

Much less frequent occurrences are "not knowing quite how much you are supposed to do in a day" and "having too little work to do." Some other obstacles volunteered by office workers are poor communications (mentioned by 10% of management-level workers), problems with co-workers and their attitudes (mentioned by 6%), and a poor office environment, noise and other distractions in particular (cited by 6% of regular workers).

The most serious obstacles, on the other hand, are somewhat different in rank order than those which occur on the job most often:

- "Not getting good enough instructions and information" is chosen by 15% of office workers as the one most serious problem in their getting their jobs done well;
- "Having too much work to do" is close behind, and is considered the most serious problem by management-level employees;
- "Not having enough time to do the job properly" is 3rd most serious overall; and
- "Being unclear on just what the scope and responsibilities of the job are" is 4th-ranked as most important, mentioned most frequently by supervisory-level workers.

Problems met with at work by office workers at different job levels. (Scores)

Table II-6

Q.2d: I'm going to read you some problems other people have told us they meet with at their work. For each one, would you tell me if you find it something that happens to you at your work always, often, sometimes, only occasionally, or never?

		Job Level		
	Total	Management	Supervisory	Regular Worker
	(score)			
Having too much work to do	48	54	49	47
Feeling that the amount of work you have to do interferes with how well it gets done	34	34	34	34
Not having enough time to do the job properly	32	36	34	31
Being unclear on just what the scope and responsibilities of your job are	29	28	29	30
Being unsure how well you are doing at your job	25	26	25	26
Not getting good enough instructions and information from your supervisor to do your job well	25	22	26	26
Feeling that your work surface, chair, storage space, and other office furniture are out of date or not suitable for your job	19	15	24	19
Feeling that the tools, equipment, and materials you have to work with are out of date or not suitable for your job	18	19	21	18
Not knowing quite how much you are supposed to do in a day	17	16	15	19
Having too little work to do	17	12	16	19

Scoring: 100 = always; 75 = often; 50 = sometimes; 25 = occasionally; 0 = never.

Other problems in getting a job done well.

Table II-7

Q.2f: Are there any other problems that I haven't mentioned that you feel make it difficult for you to get your job done well?

		Job Level		
(Number of respondents)	**Total (1047)**	**Management (221)**	**Supervisory (205)**	**Regular Worker (597)**
	%	%	%	%
Poor communications; unclear or lack of information	8	10	9	7
Poor attitudes; have difficulties with subordinates/co-workers, poor team effort	6	6	5	6
Poor office environment, e.g., noisy, distracting, etc.	4	4	2	6
Insufficient staff, not enough qualified personnel	4	8	4	3
Poor management/leadership	4	6	4	4
Intra-/inter-departmental conflicts; office politics	3	3	4	3
Too much pressure	2	1	2	3
Too much red tape, paperwork, etc.	2	3	3	1
Lack of positive reinforcement	2	2	1	2
Difficulty of getting adequate equipment	1	2	1	1
Office too small for size of staff/overstaffed	1	1	1	2
Hours are too short, not enough hours	1	-	1	1
Personal problems, home problems	1	1	-	1
Budget problems	-	1	-	-
Not being paid enough	-	-	-	1
Any other reason	5	5	5	6
None	57	53	55	59
Do not know	5	5	8	5

Most serious problems in getting a job done well.

Table II-8

Q.2e: If you had to choose, which one of these problems do you feel is the most serious in preventing you from getting your job done well?

		Job Level		
(Number of respondents)	**Total (1047)**	**Management (221)**	**Supervisory (205)**	**Regular Worker (597)**
	%	%	%	%
Not getting good enough instructions and information from your supervisor to do your job well	15	14	11	16
Having too much work to do	14	19	13	13
Not having enough time to do the job properly	12	14	14	11
Being unclear on just what the scope and responsibilities of your job are	11	11	15	10
Feeling that the amount of work you have to do interferes with how well it gets done	9	10	12	9
Feeling that the tools, equipment, and materials you have to work with are out of date or not suitable for your job	5	6	5	4
Being unsure how well you are doing at your job	4	2	4	4
Feeling that your work surface, chair, storage space, and other office furniture are out of date or not suitable for your job	3	1	5	3
Having too little work to do	3	2	3	3
Not knowing quite how much you are supposed to do in a day	2	1	2	2
None	8	9	5	8
Not sure/no answer	14	11	11	16

Observation:

Although office workers feel that productivity in the form of more work produced in the same amount of time would be possible if the conditions and circumstances of their work were changed, it seems that the most common feeling among office workers is that their jobs could be done better if there were less work or more time to do it in.

Improvements in the office in two other basic areas, however, could lead to increased productivity as well as to increased quality of work: communications, which are a particular concern of management-level workers but which also affect regular workers (who feel that occasionally their supervisors fail to properly instruct or inform them); and improvements in the office environment.

Inadequate office furniture, tools, and equipment seem to be common complaints among supervisors, but do occur at the other job levels. They are, however, not considered serious obstacles to a job well done. Of greater significance is the fact that a poor office environment (especially a noisy and distracting one) is the third most frequently volunteered response as another common problem on the job.

Changes in the office to improve working conditions and increase productivity. Eleven possible changes in company or organizational policy which might affect productivity were posed to office workers with the question, "How effective do you feel each would be in helping you and your work colleagues in your office to accomplish more than you used to during the same time period?"

Large majorities of office workers in all types of jobs feel that "studying exactly what people do on the job and reorganizing what they do so that work flows smoothly from person to person and from department to department" would make them more productive. A high 80% of professionals feel that that kind of task study and reorganization would make them more productive, and over 70% of clerical workers, secretaries, and office workers in executive/supervisory/managerial jobs feel this way. More office workers feel that this kind of measure would increase productivity than any of the other measures tested in the survey.

Ranked 2nd as effective by executive/supervisory/managerial workers, professionals, and secretaries is "cutting down on the amount of noise and distraction in the office," which is ranked only 7th by clerical workers, although a 56% majority of clerical workers still feel this move would increase their productivity.

"Let all employees share equally in the profits of the company" is considered by more clerical workers than by executive/supervisory/managerial workers to be an effective means of increasing productivity, although again more of the executive group feel it would increase their productivity than not.

Ten of the eleven measures are considered by most office workers to have the potential for increasing productivity. The others are:

- "Studying exactly what people do on the job and then making sure that their work surfaces, chairs, lighting, and storage space are what they need to do their jobs" (62-37% feel this would increase productivity);
- "Giving employees a greater say in how their duties and personal work areas are organized" (61-36%);
- "Letting all employees share in the profits of the company with their share based on how well they do their jobs as rated by their supervisors" (54-32%);
- "Giving employees extra pay for every full month with no late or sick days" (54-43%);
- "Rearranging the office so that people who usually work together are closer and people who do not are further apart" (54-42%);
- "Investing in more computer and electronic equipment" (52-42%); and
- "Flexitime, allowing employees to stagger their work hours according to the type of job they have and their preferred hours" (51-46%).

The last measure (one advocated by some office planners as a means of improving communication in the office) "changing the office design so that employees, supervisors, and management are less closed off from one another," is judged by 49% of office workers as likely to neither increase nor decrease productivity; 29% feel it would increase their productivity (a greater 34% of executive/supervisory/managerial workers feel this way) and 14% feel it would have a negative effect on productivity.

Relative effectiveness of possible changes in workplace for increasing productivity.

Table II-9

Q.3e: Recently, companies have been making changes in the workplace in order to improve working conditions, increase productivity, or cut down on waste and energy costs. I'm going to read you some types of changes, and for each one I'd like you to tell me how effective you feel it would be in helping you and your work colleagues in your office to accomplish more than you used to during the same time period. Do you feel you would be more productive, less productive or produce about the same amount as before if your company (ITEM)?

		Job Type			
(Number of respondents)	Total (1047)	Executive/ Manager/ Supervisor (245)	Professional (319)	Secretarial (121)	Clerical (274)
	%	%	%	%	%
Studied exactly what people do on the job and reorganized what they do so that the work flows smoothly from person to person and from department to department					
More productive	76	79	80	75	71
Less productive	2	1	2	2	2
About the same	20	18	16	20	24
Not sure/no answer	2	1	2	3	3
Let all employees share equally in profits of the company					
More productive	64	58	66	65	66
Less productive	3	3	4	3	3
About the same	22	27	17	24	24
Not sure/no answer	11	13	13	7	7
Cut down on the amount of noise and distraction in the office					
More productive	64	67	67	66	56
Less productive	2	1	1	1	2
About the same	32	29	31	30	39
Not sure/no answer	2	2	-	3	2

Studied exactly what people do on the job and then made sure that their work surfaces, chairs, lighting and storage space are what they need to do their jobs					
More productive	62	60	63	66	59
Less productive	2	2	1	3	3
About the same	35	37	34	29	36
Not sure/no answer	2	1	2	2	1
Gave employees a greater say in how their duties and personal work areas are organized					
More productive	61	62	61	66	59
Less productive	7	7	7	5	7
About the same	29	29	29	26	31
Not sure/no answer	2	1	3	2	3
Let all employees share in the profits of the company, with the percentage of share based on how well they do their jobs, as rated by their supervisors					
More productive	54	53	50	59	57
Less productive	9	6	13	10	8
About the same	23	23	26	22	22
Not sure/no answer	13	18	12	9	13
Gave employees 8 hours' extra pay for every full month they have no late or sick days					
More productive	54	48	49	67	60
Less productive	1	2	1	2	-
About the same	42	47	47	26	37
Not sure/no answer	3	2	3	4	3
Rearranged the office so that people who usually work together are located closer to one another and people who only occasionally or never work together are further apart					
More productive	54	52	60	59	49
Less productive	8	9	6	7	8
About the same	34	35	33	30	38
Not sure/no answer	4	4	2	5	5
Invested in more computer terminals and electronic typing, filing, printing and copying equipment					
More productive	52	51	56	48	49
Less productive	6	4	6	7	7
About the same	36	37	32	38	37
Not sure/no answer	7	8	5	7	7
Allowed some employees to come in earlier and leave earlier and others to come in later and leave later according to the type of job they have and the hours they prefer					
More productive	51	49	57	48	48
Less productive	16	18	15	15	13
About the same	30	29	25	34	34
Not sure/no answer	4	4	3	3	5
Changed the office design so that employees, supervisors and management are less closed off from one another					
More productive	29	34	29	30	26
Less productive	14	14	14	15	12
About the same	49	48	50	45	52
Not sure/no answer	7	4	7	10	9

Perceived connection between office surroundings and job performance. When asked, in general, the degree to which they feel there is a connection between their satisfaction with their office surroundings and their job performance, a 57% majority of office workers reply that they think satisfaction with office surroundings affects doing their job well a great deal. Another 35% feel it affects their job performance only some, and only 7% feel it hardly affects their job at all.

A higher 73% of secretaries feel there is a great deal of a connection between their office surroundings and their job performance, and a lower 51% of professionals feel this way. Moreover, more women than men say that the way they feel about their office surroundings affects their doing their jobs well.

Observation:

The fact that a nearly unanimous 92% majority of office workers perceive a connection between their personal satisfaction with their office surroundings and their job performance places added emphasis on the importance of office planning and design that does, indeed, meet the needs of office workers. It is, moreover, strong evidence for the argument that office planning should not be given a low priority when increases in productivity measures are considered.

Table II-10

Q.13c: In general, how much of a connection do you think there is between being satisfied with your office surroundings and doing your job well? Do you think satisfaction with your office surroundings affects your doing your job well a great deal, only some, or hardly at all?

		Sex		Job Type			
(Number of respondents)	**Total (1047)**	**Male (458)**	**Female (589)**	**Executive Manager Supervisor (245)**	**Professional (319)**	**Secretarial (121)**	**Clerical (274)**
	%	%	%	%	%	%	%
Great deal	57	50	63	53	51	73	63
Only some	35	40	31	39	42	23	30
Hardly at all	7	9	5	8	6	4	7
Not sure/no answer	-	-	-	1	-	-	-

Chapter III

The Changing Office Environment: Workspaces and furniture, tools and equipment.

A. Objectives:

The objectives of this section of the survey were to look at the types of offices in which office employees work, and to examine the basic tasks and tools of their work, especially the extent to which office electronics has become a part of that work. In addition, changes in workspaces, tasks, and responsibilities and tools over the past five years are examined.

B. Summary:

The cross-section of office workers was categorized by type of office through visual aids for five types of office plans, which fell into three basic categories: conventional, "clerical" pool, and open plan. Approximately 4 in 10 office workers feel that the conventional office comes closest to describing their workspaces, about 3 in 10 choose one of three types of open plan, and 14% of office workers work in a pool office. A fairly large 17%, however, either feel that "none" of the plans describe their offices, or are not sure.

Larger percentages of office workers are familiar with these office types, either from their own or from offices they have visited: 86% are familiar with conventional offices, 70% with pool offices, and a smaller 61% are, on average, familiar with an open plan office.

On average, all office workers spend six hours of their working day in their offices, with about two-thirds of that time spent at their desks or other work surfaces. Secretaries and clerical workers, and women, spend significantly more time at their desks than do managerial and professional workers, and men.

Most office workers (54%) share their workspaces with one or more co-workers. The average number of office workers sharing an office or other workspace is six. Management-level, executives/managers/supervisors, and secretarial workers are most likely to have private offices; professionals and clerical workers tend to share.

The most time-consuming tasks for office workers are "tending or operating machines" (this task takes up the most time of secretaries and clerical workers), "administering, supervising, and scheduling" (for executives, supervisors, and managers) and "writing or creating" (for professional workers). Overall, "helping and serving people" is the most important and satisfying task on the job, but other duties, such as using the telephone, filling out forms, and taking instructions, which are perceived to be much less satisfying, take as much or more time for many workers.

A 54% majority of office workers use some kind of telecommunications, data processing, word processing, or other electric equipment on the job. The most common types of equipment are the electric typewriter, calculators and adding machines, and the computer terminal. Office workers in all categories use some kind of electric equipment. The computer terminal has made its way into the ranks of executives/managers/supervisors (16% use terminals or keyboards), professionals (22%, including data processing professionals, use computer terminals), secretarial workers (a smaller 8% mention terminals; 6%, a computer-assisted typewriter); and clerical workers (17% mention a terminal or keyboard).

A very convincing 80% of office workers who use this equipment on the job consider it a help to them, compared to 11% who feel it is "just another part of the job." On average, 38% of the job of an office worker who uses equipment involves that equipment, more for clerical workers and somewhat less for professional and managerial workers.

Over the past five years, majorities of office workers have "changed the location of their personal workspaces or offices" and had the "design or layout" of their offices changed, and a smaller 26% have moved from traditional offices into an open plan. Since majorities of office workers have also changed jobs within a company, 50% have changed from one organization to another, and 35% have been "promoted with a move to a better office," these kinds of moves account for many of the widespread locational and design changes in offices.

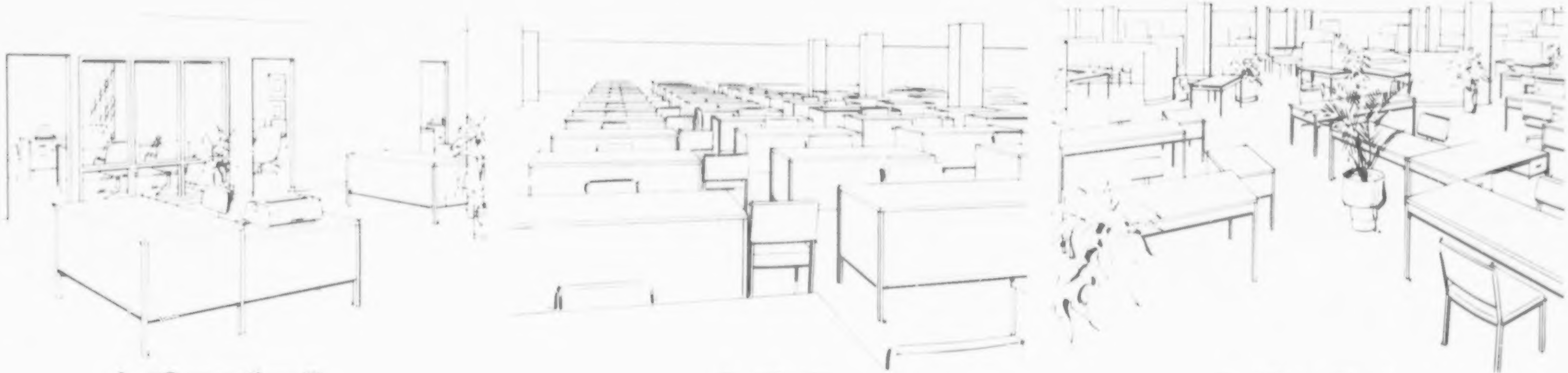
The use of new data processing or electronic equipment has happened over the past five years in 45% of office workers' jobs, and changes that involve learning new skills have happened to 73% of office workers. Changes in tasks and duties have been experienced by an equally high 72%.

Summary Observation:

The implications for office planners, designers, and the office furniture equipment industry are clear. Office workers are mobile, they are increasingly using equipment with special wiring, noise abatement and spatial needs, and they need help in making sure that the less satisfying tasks of their jobs don't detract from their primary and most satisfying function — helping and serving people. They need flexibility, office furniture that easily accommodates a variety of equipment, and efficient organization — offices that make paperwork and communications easier.

Illustration III-1A

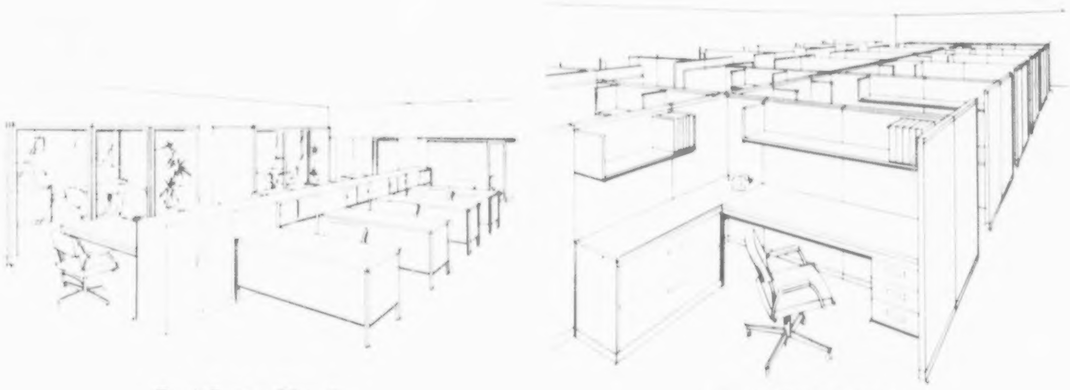
Basic drawings employed.



A. "Conventional"

B. "Pool"

C. "Open Plan"



D. "Open Plan"

E. "Open Plan"

1. The basic office types: The five drawings were shown to the cross-section of office workers, who were first asked with which types of offices they felt they were familiar, either from their own offices or from offices they may have visited.

Type A describes "conventional" office — a private office in a row of such offices, with secretarial/reception areas outside it. It is the office type most familiar to office workers, with 86% saying they are familiar with it.

Type B is a drawing of another type of conventional office, the clerical "pool" office. Although this office is felt by many office design and planning professionals to be outdated by newer types of offices, a sizeable 70% of all office workers are familiar with it.

Types C, D, and E are variations on the "open plan" office. For purposes of this survey, "open plan" has been defined very broadly as an office with few or no fixed walls or partitions.

Type C describes the "office landscape," perhaps the earliest form of open plan office, and one which has met with some acceptance, but which is not considered to be as widespread as the other types of open plan. Office workers are least familiar with the "office landscape," although a majority recognize it.

Type D illustrates two characteristic aspects of the open plan — use of movable and/or glass partitioning for "semi-private" offices, and use of office furniture to provide some partitioning and privacy for individual desks. A 62% majority of office workers recognize this type of office.

Type E illustrates greater use of office furniture systems to provide built-in partitioning and separation between individual workspaces, and 66% of office workers are familiar with this type of office system.

Familiarity with basic office types.

Table III-1

Q.8b: Here are some drawings of different kinds of office plans, which we will call Type A, Type B, Type C, Type D, and Type E. With which types are you familiar from your own office or from offices you've visited?

(Number of respondents)	Total (1047)
	%
Type A	86
Type B	70
Type C	56
Type D	62
Type E	66
None	1
Not sure/no answer	2

Observation:

The nearly infinite variations of office types reflect well on the flexibility of office design today in meeting the varying needs of individual organizations and departmental functions. They are not, however, easy to classify or to name in a way acceptable and understandable to both office experts and office workers. These five drawings of office types, while they may not describe the full range of office types extant or even describe all the common types of offices within each of our broad categories (conventional, pool, and open plan), are all recognizable to a majority of office workers, and will serve henceforth in this report as a basis for discussing office workers' attitudes toward their offices.

Who works in which offices.

A greater than average percentage of workers in health and educational organizations, and in the executive/corporate and personnel departments of organizations work in conventional offices.

A greater than average percentage of workers in manufacturing, in government, and particularly in insurance and real estate companies work in pool offices. Office workers in financial or accounting departments or in customer service are more likely to work in pool office areas.

The open plan characterizes communications and public service (utility) companies (41% of office workers in these companies work in some form of the open plan), business and professional service industries (45% of these workers work in an open plan office), and banking and investments (37% of their workers work in an open plan). Office workers whose jobs primarily involve data processing (44% of such workers) are more likely to work in open plan offices.

Office types.

Table III-2

Q.8c: Which type comes closest to describing the office area in which you usually work?

		Job Type				Job Level		
(Number of respondents)	Total (1047)	Executive/ Manager/ Supervisor (245)	Profes- sional (319)	Secre- tarial (121)	Cler- ical (274)	Manage- ment (221)	Super- visory (205)	Regular Worker (597)
	%	%	%	%	%	%	%	%
Type A	39	48	33	56	34	56	40	32
Type B	14	11	14	7	18	5	16	17
Type C	8	7	8	7	10	5	5	10
Type D	10	9	10	8	11	9	4	13
Type E	12	11	19	5	8	10	15	11
None	13	11	12	12	12	11	14	12
Not sure/no answer	4	3	3	5	6	3	6	4

Predominance of office types in various industries and departments.

Table III-3

Q.8c: Which type comes closest to describing the office area in which you usually work?

		Industry							Job Function/Department				
(Number of respondents)	Total (1047)	Manufac- turing (197)	Govern- ment (178)	Health and Educa- tion (125)	Communi- cations and Public Services (100)	Business and Profes- sional Services (96)	Insur- ance and Real Estate (83)	Banking and Invest- ments (66)	Account- ing/ Book- keeping/ Financial (176)	Data Proces- sing (84)	Customer Service (71)	Exec or Corpo- rate (75)	Per- son- nel (72)
	%	%	%	%	%	%	%	%	%	%	%	%	%
Type A "Conventional"	39	35	42	49	27	35	29	42	35	29	31	57	51
Type B "Pool"	14	18	18	8	15	7	24	11	16	11	20	7	15
Type C "Landscape"	8	9	7	4	7	10	12	8	7	12	6	7	6
Type D	10	10	7	12	16	17	7	14	16	8	10	8	7
Type E	12	14	12	3	18	18	12	15	8	24	15	11	6
OPEN PLAN	30	33	26	19	41	45	31	37	31	44	31	26	19
None	13	9	12	16	15	9	8	6	12	14	10	7	14
Not sure/no answer	4	4	2	8	2	3	7	5	2	1	1	-	1

Who works in which offices.

People who work in open plan offices also tend to be young (39% under 30 years of age), professional workers (37% are classified into professional jobs), or clerical (25%) and regular workers (65% are regular workers, 16% supervisory level, and 17% management level).

The office workers who work in pool offices are fairly evenly split into the three age categories, clerical (34%) and professional (31%) workers, and a large 70% at a "regular" job level.

Those in conventional offices tend to be 40 or older (41%), executive/managerial/supervisory or professional workers (29% and 26%), and 31% are in management level jobs.

Table III-4

(Number of respondents)	Total (1047)	Conventional (405)	Pool (148)	Open Plan (318)
	%	%	%	%
Age				
18-29 years	34	29	36	39
30-39 years	29	30	26	32
40 years and over	37	41	37	29
Type of Job				
Executive/managerial/ supervisory	23	29	18	21
Professional	30	26	31	37
Secretarial	12	17	6	8
Clerical	26	23	34	25
Job Level				
Senior management	5	10	1	1
Management	16	21	7	16
Supervisory	20	20	22	16
Regular worker	57	47	70	65

Time in the office.

Office workers, on average, spend 6 hours working in their personal workspaces. These figures vary little by type of job. The amount of time actually spent at a work surface, however, varies considerably. While, on average, office workers spend two-thirds of their working day sitting at their desks or other work surfaces, secretaries estimate they spend nearer to three-quarters of their day sitting at a desk, and clerical workers also spend more time at their desks than do managerial or professional office workers. Since such a high concentration of women are employed in these jobs, there is a significant difference in the amount of time spent by men and by women at their desks — with men estimating, on average, that they spend 11% less time at their desks than do women.

Hours spent in workspace on an average day.

Table III-5

Q.8f: In an average day, how many hours do you spend working in your personal workspace?

(Number of respondents)	Total (1047)
	%
Less than 1 hour	1
1 - 2 hours	3
2 hours, 1 minute - 3 hours	4
3 hours, 1 minute - 4 hours	6
4 hours, 1 minute - 5 hours	11
5 hours, 1 minute - 6 hours	17
6 hours, 1 minute - 7 hours	25
7 hours, 1 minute - 8 hours	28
Over 8 hours	5
Not sure/no answer	1
Median (in hours)	6.4

Office privacy — the sharing of workspaces.

Younger office workers are more likely to share their workspace with one or more people than are office workers 40 years of age and over. 65% of office workers aged 18 to 29 share their workspaces, while 54% of office workers aged 40 and over are alone in their workspaces.

A high 68% of management-level office workers have private offices, and a low 38% of regular workers do. Across job functions, 58% of secretaries and 56% of executives/managers/supervisors have private offices, compared with 53% of professionals and 68% of clerical workers who share their workspaces.

The median number of co-workers in shared offices is 6. Not surprisingly, those who share conventional offices do so with an average of 4 persons, those in open plan offices share with 6 persons on average, and those in pool offices share with a much higher 9 people.

Percentage of day spent at desk or other work surface.

Table III-6

Q.8g: In an average day, what percentage of your working time would you estimate you spend sitting at your desk or other work surface?

		Sex		Job Type			
(Number of respondents)	Total (1047)	Male (458)	Female (589)	Executive Manager/ Supervisor (245)	Professional (319)	Secretarial (121)	Clerical (247)
	%	%	%	%	%	%	%
None	1	1	1	1	-	-	2
1-25%	10	13	8	9	12	4	7
26-50%	15	21	11	24	18	5	12
51-75%	26	28	24	30	29	25	20
76-99%	40	32	47	32	35	59	47
100%	7	4	10	4	6	7	12
Not sure/no answer	-	1	-	-	-	-	-
Mean percentage of working time	66	60	71	61	64	77	72

Sharing of workspaces.

Table III-7

Q.8d: Do you share your workspace with other people, or are you the only person working in that space? (IF SHARE:) How many people share your working space with you?

		Age			Job Type				Job Level			Type of Office		
(Number of respondents)	Total (1047)	18-29 (351)	30-39 (308)	40 and Over (386)	Executive Manager Supervisor (245)	Profes-sional (319)	Secre-tarial (121)	Cler-ical (274)	Manage-ment (221)	Super-visory (205)	Regular Worker (597)	Conven-tional (405)	Pool (148)	Open Plan (318)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Share	54	65	53	46	43	53	42	68	31	57	62	46	70	55
Only person	45	32	46	54	56	46	58	31	68	43	38	53	30	44
Not sure/no answer	-	1	-	-	-	-	-	-	-	-	-	-	-	-
(If Share) Median number sharing workspace (exclusive of respondent)	5	5	5	5	4	4	5	5	3	4	5	4	9	6

Which tasks take how much time.

The one task that demands the most time in office work in general is "helping or serving people." However, most time-consuming for more secretaries and clerical workers is "tending or operating machines (including typewriters and calculators)." In fact, a large 50% of secretaries say that tending or operating machines takes up most of their job. And more time-consuming for managerial workers is "supervising, scheduling and administering" — 49% of executives, managers and supervisors say that it takes up most of their time on the job.

The jobs of professionals are more evenly divided between "writing or creating" (28% say it takes up most of their time), "helping or serving people" (24%), and "advising or consulting" (21%).

Clerical workers spend their time on the job "tending or operating machines" (27%), "sorting, filing, or distributing documents" (24%), and "preparing or filling out forms" (20%).

On the other hand, "helping and serving people" is the unanimous choice of all office workers across all job categories as the single most satisfying task on the job. Managerial workers are equally enthusiastic about administration and supervision, but a close 47% plurality of all office workers single out serving people as the most satisfying aspect of their jobs. Neither the second and third choices of managers and professionals (advising or consulting, and writing or creating) nor those of secretaries and clerical workers (tending/operating machines, and advising or consulting) command the same response.

Least favorite tasks on the job include "taking instructions" — no more than 2% of any group single this out — and sorting and filing or preparing and filling out documents and forms, although slightly more clerical workers, who spend more time at these tasks, also find satisfaction in them.

Office work: time-consuming tasks.

Table III-8

Q.5f: I'd like you to tell me which of these tasks take up most of your time on the job?

					Job Type					
(Number of respondents)	Total (1047)		Executive/ Manager/ Supervisor (245)		Profes-sional (319)		Secre-tarial (121)		Clerical (274)	
	%	Rank #	%	Rank #	%	Rank #	%	Rank #	%	Rank #
Helping or serving people	20	1	24	2	24	2	13	4	18	4
Tending or operating machines (including typewriters, calculators)	18	2	5	7	5	8	50	1	27	1
Supervising, scheduling or administering	18	2	49	1	13	6	7	6	4	7
Preparing or filling out forms	16	4	13	5	15	5	16	3	20	3
Using the telephone	15	5	17	4	16	4	22	2	12	5
Advising or consulting	14	6	21	3	21	3	6	8	4	7
Writing or creating	12	7	8	6	28	1	2	10	3	9
Sorting, filing, or distributing documents	11	8	4	8	4	9	13	4	24	2
Editing or correcting	7	9	4	8	9	7	7	6	7	6
Taking instructions	1	10	-	10	1	10	3	9	1	10
Other	3		2		4		2		2	
All (vol.)	1		1		1		2		2	
None	-		-		-		-		-	
Not sure/no answer	2		2		1		2		3	

Office work: satisfying tasks.

Table III-9

Q.5e: Now, which of these tasks that apply to your job give you the most satisfaction?

(Number of respondents)	Total (1047)		Executive Manager Supervisor (245)		Professional (319)		Secretarial (121)		Clerical (274)	
	%	Rank #	%	Rank #	%	Rank #	%	Rank #	%	Rank #
Helping or serving people	47	1	46	1	50	1	51	1	45	1
Advising or consulting	29	2	38	3	37	2	18	3	18	3
Supervising, scheduling or administering	21	3	46	1	18	4	17	4	7	6
Writing or creating	17	4	14	4	29	3	16	5	7	6
Tending or operating machines (including typewriters, calculators)	11	5	3	6	5	5	20	2	22	2
Using the telephone	7	6	5	5	3	7	14	6	12	4
Editing or correcting	5	7	3	6	4	6	9	7	7	6
Preparing or filling out forms	3	8	1	9	3	7	2	8	7	6
Sorting, filing, or distributing documents	3	8	1	9	-	9	2	8	8	5
Taking instructions	2	10	2	8	-	9	-	10	2	10
Other	2		3		2		1		2	
All (vol.)	1		1		1		2		1	
None	1		1		1		2		2	
Not sure/no answer	2		1		2		2		3	

Office work — data processing, telecommunications, and electronics.

A 54% majority of office workers use some kind of telecommunications, data processing, word processing, or other electric equipment on the job. The most common types of equipment mentioned are the electric typewriter, calculators and adding machines, and the computer terminal.

Majorities of professional workers, secretaries, and clerical workers use some type of electric equipment on the job, as do a substantial 49% of executives/managers/supervisors.

The types of equipment most commonly used by executives/managers/supervisors are computer terminals (16% of these office workers mention a terminal or keyboard), calculators or adding machines (13%) and electric typewriters (10%).

Since the professional category includes programmers and other data processing professionals, it is not too surprising that a higher 22% of professional workers use a computer terminal or keyboard in connection with their work nor that 12% mention a computer or minicomputer. In addition, 12% use calculators or adding machines; 9%, an electric typewriter.

Secretaries are, of course, the heaviest users of the electric typewriter — 38% mention the electric typewriter as a part of their jobs. A smaller 8% of secretaries use a computer keyboard or terminal; 6% mention a computer-assisted typewriter of some kind. A high 18% use photocopying equipment, and 17% use calculators or adding machines. Nearly 10% mention dictation equipment. Secretaries are, overall, somewhat more likely users of electric office equipment than other office workers.

A high 20% of clerical office workers use a calculator or adding machine on the job, 18% use electric typewriters, and 17% mention a computer keyboard or terminal as part of their work. After professional workers, clerical workers are the most likely to use some kind of data processing equipment: 29% mentioning a computer or terminal, keypunch or other input equipment or miscellaneous data processing equipment.

The use of equipment varies in different office types as well — although here it must be remembered that the types of workers in these offices vary considerably. An even 50% of office workers in conventional offices, 55% of office workers in pool offices and a higher 58% of workers in open plan offices use some type of equipment. Data processing equipment is most often used in pool or open plan offices. More workers in open plan offices also mention some kind of telecommunications equipment — telephone, switchboard or console, and telex, particularly.

Use of data processing, telecommunications and other types of equipment by job and office type.

Table III-10

Q.6a: Do you use or operate any telecommunications, data processing, word-processing, or any other kinds of computer terminals or electric equipment on your job, or not? (IF YES:) Please describe the equipment you use or operate.

		Job Type				Type of Office		
(Number of respondents)	Total (1047)	Executive Manager Supervisor (245)	Professional (319)	Secretarial (121)	Clerical (274)	Conventional (405)	Pool (148)	Open Plan (318)
	%	%	%	%	%	%	%	%
Total who use equipment	**54**	**49**	**52**	**58**	**56**	**50**	**55**	**58**
Data processing — all types	28	25	34	15	29	24	34	31
Computer terminal/keyboard	17	16	22	8	17	14	24	19
Computer or mini-computer	8	6	12	5	6	7	7	10
Keypunch/disc/input/optical scan	6	4	6	2	7	5	7	5
Miscellaneous data processing equipment	2	2	1	2	3	3	1	3
Word processing — all types	19	14	14	42	21	20	14	19
Electric typewriter	15	10	9	38	18	17	9	16
Computer-assisted typewriter	5	5	5	6	4	4	5	5
Telecommunications — all types	9	8	7	14	10	9	2	11
Switchboard/console/telephone	3	4	2	5	3	4	-	5
Facsimile transmitters/telecopiers	2	1	2	4	3	2	1	2
Computer or data transmitters that hook up by telephone	2	1	1	2	2	3	1	2
Telex	2	3	2	3	2	1	1	4
Other electronic equipment	25	21	22	36	30	26	22	27
Calculators and adding machines	15	13	12	17	20	15	13	17
Photocopying equipment	7	7	4	18	8	8	3	8
Audio-visual equipment (videotape, cameras, projectors, tapedecks)	4	4	4	1	4	3	4	5
Dictation equipment (cassette recorder, stenotype, transcription equipment)	2	1	3	9	1	3	1	1
Miscellaneous	6	6	4	4	9	4	5	8
Not sure	**2**	**1**	-	-	**1**	-	-	-
Do not use equipment	**44**	**50**	**48**	**42**	**43**	**50**	**45**	**42**

Office electronics: what percentage of office work involves them.

III-11

Q.6b: Approximately what percentage of your job involves working with this type/these types of equipment?
(Base: use/operate equipment.)

		Job Level			
(Number of respondents)	**Total (586)**	**Executive/ Manager/ Supervisor (123)**	**Profes-sional (166)**	**Secre-tarial (70)**	**Clerical (159)**
	%	%	%	%	%
1-25%	51	60	72	35	35
26-50%	19	21	11	26	22
50-75%	10	7	7	15	12
76-99%	13	9	8	15	19
100%	7	3	2	8	11
Not sure/no answer	10	1	1	3	7
Mean percentage	38	31	27	45	49

Office electronics: role on the job.

Table III-12

Q.6d: Do you feel this equipment is a help to you on your job, just another part of your job, or does it make your job harder?
(Base: use/operate equipment.)

(Number of respondents)	**Total (586)**
	%
Help	80
Just another part of the job	11
Makes job harder	2
Can't do my job without it (vol.)	8
Not sure/no answer	9

Observation:

There has been a great deal of public attention paid to the office of the future, characterized by computer communications, electronic mail, computer-assisted typewriters and printers, and a whole range of data processing equipment developed to meet the information needs of the office worker. While this type of equipment has not yet come to dominate the office, it is widespread. The electric typewriter, the telephone and the photocopier are being supplemented in many offices by more sophisticated forms of office equipment. Significantly, this equipment is familiar to office workers in all types of jobs, and its use is not confined to one area of the office. The implications of these changes for offices have not been ignored by office planners and designers, and their importance cannot be overstressed. The special wiring, noise abatement and spatial needs of this equipment will have to be met, and not very far in the future.

Changes experienced by office workers.

By far the most likely changes to have occurred to an office worker in a job over the past ten years are:

- A change in the location of personal workspace or office.
- Changes that required learning new skills.
- Changes in the kind of tasks or duties performed on the job.

A very sizable 81% of executives, managers and supervisors have experienced a change in the location of their offices, but no less than a 64% majority of clerical workers have experienced this kind of change as well.

Close to three-quarters of all office workers have had to learn new skills on the job — a smaller 59% majority of secretaries have acquired new skills. And 72% of office workers have had, similarly, a change in the kind of tasks they perform on the job.

Certainly a substantial part of the explanation for widespread changes in office location lies in the fact that a majority of office workers have "changed jobs within an organization or company," with close to 50% of executives/managers/supervisors having been "promoted with a move to a better office." Professional and secretarial workers are likely to have moved up.

However a 54% majority of all office workers have also seen their office re-designed or given a new layout, and 26% say that they have experienced a move from a traditional plan to an open plan over the past five years. These kinds of changes are fairly evenly spread across all job categories, and although executives/managers/supervisors may be more likely to have seen a new design or layout in their offices, a sizable 29% of clerical workers have experienced a change in office design.

The rapidity with which new types of office equipment have come into the office is evidenced once more by the fact that a large plurality of office workers — 45% — have in the past five years begun using new electronic or data processing equipment on the job.

Finally, a 58-39% majority of office workers say that they have not experienced any changes in office operations to save energy; managers are somewhat more likely than clerical workers to have perceived energy conservation measures, but a slim 51% majority of managers are unaware of any such changes.

Changes experienced by office workers over the past five years.

Table III-13

Q.7a: Here are some ways a person's job or office environment can change. For each one, I'd like you to tell me whether it has happened to you sometime in the past five years, or not.

	Job Type				
(Number of respondents)	**Total (1047)**	**Executive/ Manager/ Supervisor (245)**	**Professional (319)**	**Secretarial (121)**	**Clerical (274)**
	%	%	%	%	%
Change in the location of your personal workspace or office					
Has happened	73	81	77	72	64
Has not happened	26	18	22	28	36
Not sure/no answer	1	1	-	-	-
Changes in your job that require learning new skills					
Has happened	73	76	74	59	73
Has not happened	26	24	25	40	27
Not sure/no answer	-	-	1	1	-
Changes in the kind of tasks or duties performed on your job					
Has happened	72	73	71	66	72
Has not happened	28	27	29	33	28
Not sure/no answer	-	-	1	1	-
Change of jobs within an organization or company					
Has happened	57	65	55	54	49
Has not happened	43	35	44	46	50
Not sure/no answer	-	-	1	-	-
Redesign or new layout for the office(s) in which you work					
Has happened	54	62	55	56	49
Has not happened	45	37	44	44	50
Not sure/no answer	1	1	-	-	1
Change of jobs from one organization or company to another					
Has happened	50	44	54	45	51
Has not happened	49	56	45	55	49
Not sure/no answer	-	-	1	1	1
Use of new electronic or data processing equipment					
Has happened	45	42	50	38	45
Has not happened	54	58	49	61	55
Not sure/no answer	1	-	-	1	1
Change in office operations to save energy					
Has happened	39	46	38	40	33
Has not happened	58	51	59	60	63
Not sure/no answer	3	3	3	1	4
Promotion with a move to a better office					
Has happened	35	49	34	34	26
Has not happened	64	50	64	65	73
Not sure/no answer	1	1	2	1	1
Change in the type of office you work in from a traditional plan to an open plan — that is, a plan with few or no fixed walls dividing spaces					
Has happened	26	27	25	26	27
Has not happened	72	72	73	74	70
Not sure/no answer	2	2	2	-	3

Chapter IV

Meeting the Needs of the Office Worker: Style, function and status in the office environment.

A. Objectives:

This section of the survey was designed to answer three questions:

- What aspects of their offices do office workers perceive as being most important to them personally?
- Do the offices of today answer those needs and expectations?
- And, in studying the implications, what overall guidelines can office designers and planners use in planning for the needs and expectations of office workers?

B. Summary:

The way their personal workspaces look and work for them is important to 94% of office workers, and "very" important to close to half of all office workers. This, in conjunction with the earlier finding that office workers perceive a great deal of a connection between their satisfaction with their office surroundings and their job performance, is an indication of how critical it is to examine in detail what aspects of the office are most important to them.

Overall, a 65% majority of office workers now approve of their organizations' offices in terms of making it easier for employees to get their jobs done well, and a smaller 57% majority approve of the way they look. Exceptions to this are the 56-44% majority of office workers in government jobs who rate their offices negatively for the way they look, and the 52% majority in "pool" style offices who feel the same way.

The characteristics of the office that office workers feel are most important to their job performance are "ability to concentrate without noise and other distractions" and, "heat, air conditioning and ventilation," "access to tools, equipment, and materials" and "conversational privacy."

Most office workers give their offices low scores on "ability to concentrate without noise and other distractions" and "conversational privacy" (as well as on "visual privacy," although this is seen as less important).

Office workers who have private offices, executives/managers/supervisors, and those in conventional offices rate their offices positively on these two attributes, but give their offices lower ratings on these, as opposed to other, aspects. These are also the workers most likely to feel that conversational privacy is important to their jobs.

Nearly 50% of office workers single out a "neat and well-organized look" as the most important quality in the way an office looks. "Amount of personal space" is also an important quality to office workers in their overall perception of an office.

"The way it reflects the personality of the person working there," the materials and style of office furniture, impressiveness, and how up to date the office is are noticed more often than such details as wall decorations, color, floor covering, and use of plants.

Office workers rate their offices negatively on five aesthetic attributes: "how much they impress visitors," "the way they reflect the personality of the person working there," the "amount of privacy," "paintings, posters or other wall decorations," and "use of plants."

To most office workers, "amount of privacy," "amount of personal space," and "style of desks, tables and chairs" are the three most visibly different characteristics in executive offices. Management level workers are more likely to point out "style" of office furniture, but the importance of privacy to executives/managers/supervisors and professionals cannot be ignored in the context of status.

Generally speaking, office workers in conventional style offices are more satisfied with their offices than are office workers in open plan or pool offices. The open plan office, however, clearly marks an improvement over the pool office.

The perceptions of office workers in open plan offices are comparable to those of office workers in conventional offices on a number of dimensions, such as access to other areas and departments, materials and style of office furniture, storage space for working materials, task lighting, safety, use of plants in the office, and how up-to-date they are seen to be. They are no more likely to want to see improvements in the overall attractiveness of their offices, in wall color or decorations, or in their office furniture than are office workers in conventional offices. Office workers in pool offices, on the other hand, are consistently negative on just about every aesthetic aspect of their environment except their office furniture, and are less positive about functional aspects as well.

The most striking differences in the attitudes of office workers in different types of office environments are apparent when they are asked which words or phrases best describe their office environments. The two most commonly chosen words are "functional" and "friendly." Also frequently mentioned are "comfortable," "interesting," "modern," "just a place to work," and "ordinary." Less frequently mentioned are "unfriendly," "stylish," "uncomfortable," "not functional," "cold," "boring," "shabby," and "confining."

Office workers in private offices are far more likely to describe their offices as "comfortable" and those in conventional offices tend to choose "interesting," "friendly," "comfortable," "suits my personality," "home away from home" and "impressive."

Office workers in open plan offices, however, more often single out "functional," "modern," and "open" than office workers in conventional offices. They less often describe their offices as "friendly," "comfortable," "interesting," "impressive," or "a home away from home."

Office workers in pool offices are again consistently negative — "open" is the most positive word chosen, although to contradict this, "confining" is another feeling somewhat more frequently mentioned by this group.

Overall, a high 74% of office workers are satisfied with their personal workspaces, with those in private and conventional offices by far the most satisfied group, but with 74% in open plan offices satisfied as well.

Over one-third of office workers feel that their satisfaction with their office environment has improved over the past five years, but a slightly higher 42% feel that it has stayed the same. The most frequently noticed improvements are "remodeling, repainting, refurnishing," "better, more relaxed atmosphere," "more space or more room," "new office equipment or furniture," "better office location," "more privacy," and "increased satisfaction with my job."

The most frequently mentioned reason for the 19% of office workers who feel their satisfaction with their office environment has decreased is a "failure to up-date or maintain office facilities."

Finally, when office workers are asked what two or three things they would most like to change in their personal workspaces if they had a lot of say in planning a new space or selecting equipment, there are two frequently mentioned improvements: "more privacy, to be separated from others or to have my own office" and "more personal space, a larger space."

The importance of the office to office workers.

The way their personal workspaces look and work for them overall is "very important" to close to half of all office workers, and is "very" or "somewhat" important to an almost unanimous 94%.

It is "very" important to more female than male office workers — this is true across all job categories, management to supervisory to regular — and to more secretaries and clerical workers than to executives or professionals, but large majorities in all groups consider their personal workspaces important to them.

Table IV-1

Q.11c: Would you say that the way your personal workspace looks and works for you overall is very important to you, somewhat important to you, hardly important to you, or not at all important to you?

				Job Type				Job Level								
		Sex						Management			Supervisory			Regular Worker		
(Number of respondents)	Total (1047)	Male (458)	Female (589)	Executive/ Manager/ Supervisor/ (245)	Professional (319)	Secretarial (121)	Clerical (274)	Total (221)	Male (166)	Female (55)	Total (205)	Male (103)	Female (102)	Total (597)	Male (175)	Female (422)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Very important	49	42	55	44	43	64	55	46	43	53	42	37	47	54	45	57
Somewhat important	45	51	40	51	51	34	40	50	51	45	50	58	42	41	45	39
Hardly important	5	5	4	3	5	2	5	3	4	2	5	2	9	5	9	3
Not at all important	1	2	1	2	1	-	-	1	1	-	1	3	-	1	1	1
Not sure/no answer	-	-	1	1	-	1	-	-	1	-	1	-	2	-	-	-

Office workers' overall ratings of their offices.

A convincing 65% majority of office workers rate the office spaces of their organizations positively in terms of making it easier for employees to get their jobs done well; a slightly smaller 57% majority approve of the way these offices look.

Office workers in business and professional service companies and in banks and investment houses rate their companies' offices more positively for both the way they contribute to the job and the way they look — a very high 80% of office workers in banks and investment companies rate their organizations' offices positively for the way they function, and 70% rate them the same way for the way they look.

On the other hand, government employees rate government offices negatively on aesthetics, by 56-44%, and although a majority feel they function adequately in helping employees to get their jobs done well, only a slim 52-47% majority feel that way.

Across all industries, management-level office workers rate their companies' offices more positively on both function and aesthetics than do regular-level office workers. Supervisory-level workers are least satisfied overall with their organizations' office spaces, but a majority approve of them.

The one group of office workers who are most consistently negative about the office spaces they work in are those office workers housed in pool offices; in this case, 55% approve of the functional aspects of their organizations' office spaces, but 52% disapprove of the way they look. Office workers in conventional and open plan offices feel more positive about their organizations' office spaces overall, with approximately 6 in 10 approving of function and of looks.

There are considerable differences between the attitudes of office workers who have private offices and those who share offices. While a high 70% of office workers in private offices rate their organizations' offices positively for the way they function, a smaller 61% majority of workers sharing offices feel that way. Similarly, 63% in private offices and a slim 52% majority of workers who share offices rate the office spaces in their organizations positively for the way they look.

Rating of the overall office environment — function.

Table IV-2

Q.12a: Not let's discuss the overall office environment where you work — that is, all the office spaces in your organization with which you are familiar. How well do you feel the overall office spaces in your organization work in terms of making it easier for employees to get their jobs done well — would you rate the offices excellent, pretty good, only fair, or poor in helping employees to get their jobs done well?

		Job Level			Type of Office					Industry						
(Number of respondents)	Total (1047)	Management (221)	Supervisory (205)	Regular Worker (597)	Private (473)	Shared (570)	Conventional (405)	Pool (148)	Open Plan (318)	Manufacturing (197)	Government (178)	Health and Education (125)	Communications and Public Services (100)	Business and Professional Services (96)	Insurance and Real Estate (83)	Banking and Investment (66)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Positive	65	71	59	65	70	61	69	55	68	65	52	66	61	73	65	80
Negative	34	29	40	34	30	38	30	44	32	34	47	33	37	26	35	20
Not sure/no answer	1	1	1	1	1	1	1	1	-	1	1	1	2	1	-	-

Note: "Positive" is the sum of the "excellent" and "pretty good" responses, "negative" the sum of the "only fair" and "poor" responses.

Rating of overall office environment — aesthetics.

Table IV-3

Q.12b: How about the way these offices look — would you rate your organization's offices overall as excellent, pretty good, only fair, or poor in the way they look?

		Job Level			Type of Office					Industry						
(Number of respondents)	Total (1047)	Management (221)	Supervisory (205)	Regular Worker (597)	Private (473)	Shared (570)	Conventional (405)	Pool (148)	Open Plan (318)	Manufacturing (197)	Government (178)	Health and Education (125)	Communications and Public Services (100)	Business and Professional Services (96)	Insurance and Real Estate (83)	Banking and Investment (66)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Positive	57	61	54	57	63	52	61	48	59	54	44	58	55	67	65	70
Negative	43	39	45	43	37	47	39	52	41	46	56	42	44	33	35	30
Not sure/No answer	*	-	*	*	*	*	1	-	-	1	-	-	1	-	-	-

Note: "Positive" is the sum of the "excellent" and "pretty good" responses; "negative" the sum of the "only fair" and "poor" responses.

How employees rate offices — functionally.

Priorities: "Ability to concentrate without noise and other distractions" rates first among office workers as the one functional characteristic of an office that is most important in helping them to get their jobs done well. A sizable 41% plurality of office workers give it priority.

One in 4 office workers mention "heat, air conditioning, and ventilation," "access to tools, equipment and materials," and "conversational privacy."

Negligible in importance are "storage space for personal things," "safety," and "back support of the chair."

Interestingly, "visual privacy" falls to 13th place in importance. Clustered around it, with about 10% of office workers feeling they are important, are "size," "suitability for the type of work you do," "working surface," "chair comfort," and "storage space for working materials." With 15% to 20% mentions are "access to other areas and departments," "ability to adjust your work surface, chair, and storage space," and task "lighting."

More executives/managers/supervisors and professional workers underline conversational privacy than do other workers.

There are some interesting differences in priorities for male and female office workers. Differences (which hold across all job levels, not completely accounted for by differences in position) occur on conversational and visual privacy, especially the former, where more men than women feel these are important to their getting their jobs done well; and on back support of the chair, where more women are tuned to the importance of a chair that does not contribute to back strain.

Secretaries, moreover, place more importance on chair comfort; task lighting; access to other areas and departments; access to tools equipment and materials; and heat, air conditioning, and ventilation than do other workers. Office size is also somewhat more important to secretaries. Since secretaries, as indicated previously, spend more time in their workspaces and at their desks than other types of workers, this is not surprising.

Looking once more at office workers in different types of offices, the most striking differences are:

- There is a 12-point gap between the proportion of office workers in private offices who feel conversational privacy is important and the smaller percentage in shared offices who feel that way. This is highly related to the fact that managerial and professional workers, many of whom have private offices, are the groups most concerned about their conversational privacy.
- Office workers in pool offices tend to place somewhat more importance than other office workers on "heat, air conditioning, and ventilation," "overall lighting," "storage space for working materials," and office "size."
- Open plan office workers tend to place more emphasis on shelter from noise and distraction; heat, air conditioning, and ventilation; task lighting; and chair comfort than do workers in conventional offices. They place similar priorities on conversational and visual privacy.

Table IV-4

Q.9b: Which 2 or 3 of these characteristics do you feel are most important in helping you get your job done well?

			Sex		Job Type				Type of Office				
Rank	**(Number of respondents)**	**Total (1047)**	**Male (458)**	**Female (589)**	**Executive/ Manager/ Supervisor (245)**	**Profes-sional (319)**	**Secre-tarial (121)**	**Cler-ical (274)**	**Private (473)**	**Shared (570)**	**Conven-tional (405)**	**Pool (148)**	**Open Plan (318)**
		%	%	%	%	%	%	%	%	%	%	%	%
1	Ability to concentrate without noise and other distractions	41	44	38	42	47	36	34	45	39	41	38	45
2	Heat, air conditioning, and ventilation	26	23	28	23	24	30	29	24	27	24	31	29
3	Access to the tools, equipment, and materials you work with	25	21	28	17	23	29	29	21	28	24	22	25
4	Conversational privacy	23	32	17	38	32	9	11	30	18	26	16	25
5	Lighting for the work you do	19	18	21	14	17	22	25	20	19	18	18	22
6	Ability to adjust your work surface, chair and storage space to suit your work requirements	15	15	16	11	18	16	18	15	16	15	17	15
6	Access to other areas and departments	15	16	14	15	16	23	9	16	13	15	11	16
8	Overall lighting	13	11	14	9	13	13	17	10	14	11	16	14
9	Storage space for working materials	11	11	11	10	11	11	13	13	9	10	16	11
9	Comfort of your chair	11	8	13	7	6	21	15	11	10	10	13	13
9	Working surfaces	11	11	10	9	9	7	13	12	9	11	11	11
12	Suitability for the type of work you do	10	10	9	11	9	7	11	9	10	9	9	10
13	Size	8	9	7	8	8	11	6	8	8	7	9	6
13	Visual privacy	8	10	6	9	11	3	4	10	6	8	6	7
15	Back support of your chair	4	1	5	3	2	3	7	4	4	4	5	3
16	Safety	3	3	3	3	2	1	5	1	5	3	5	2
17	Storage space for personal things	1	1	1	1	-	1	1	3	2	-	1	1
	All (vol.)	2	2	3	4	2	2	3	-	1	3	4	1
	None	-	-	-	-	-	-	-	-	-	-	-	-
	Not sure/no answer	5	5	6	7	6	7	3	5	6	8	5	3

How employees rate workspace.

The aspects of their offices given the highest scores by office workers for the way they work are (in descending order) safety; access to tools, equipment and materials; lighting; access to other areas and departments; suitability for the work done; both comfort and back support of chairs; and work surfaces.

Of 17 possible office attributes, three are given low scores: "ability to concentrate without noise and other distractions," "visual privacy," and "conversational privacy."

In the greater middle ground, where office workers are less enthusiastic but still satisfied with their offices, are (again, in descending order): "size;" "ability to adjust your work surface, chair and storage space to suit work requirements;" "heat, air conditioning, and ventilation;" "storage space for working materials;" and "storage space for personal things."

The occupants of private offices, and office workers in the other categories more likely to have private offices (executives/managers/supervisors and those in conventional offices), rate their offices positively on "ability to concentrate without noise and other distractions" and "conversational privacy," but these qualities are ranked last among these office workers. Of the three privacy-related considerations, only visual privacy has a significantly high place among office workers with private offices.

Again, workers in conventional offices tend to rate their offices more highly on most dimensions; open plan office workers are not far behind; and office workers in pool offices are consistently more negative.

The differences between the ratings by conventional office and open plan office workers on shelter from noise and distraction, visual and conversational privacy, however, are considerable. There is close to a 20-point gap on conversational privacy, 15 points on visual privacy, and 11 points on limiting noise and distraction.

On the other hand, there are insignificant differences between the way office workers in open plan offices and those in conventional offices rate them on a number of functional characteristics. They are equally positive about:

- Access to other areas and departments,
- Storage space for working materials,
- Safety,
- Task lighting,
- Back support and comfort of chair, and
- Working surfaces.

Table IV-5

Q.9a: Now I'd like you to think about how well various aspects of your personal workspace work for you — would you rate your personal workspace excellent, pretty good, only fair, or poor on (item)?

Rank		Total	Sex		Job Type				Type of Office				
			Male	Female	Executive/ Manager/ Supervisor	Professional	Secretarial	Clerical	Private	Shared	Conventional	Pool	Open Plan
1	Safety	77	80	75	78	78	81	73	81	74	81	69	78
2	Access to the tools, equipment, and materials you work with	72	73	70	71	72	78	70	76	69	76	66	72
3	Lighting for the work you do	71	73	70	75	71	74	66	74	69	75	65	72
3	Access to other areas and departments	71	73	70	72	72	71	68	73	70	73	71	72
3	Suitability for the type of work you do	71	71	70	71	72	76	68	76	67	75	62	71
6	Overall lighting	70	71	69	73	70	73	65	73	67	74	63	70
6	Comfort of your chair	70	71	69	74	71	76	63	75	65	73	64	70
8	Back support of your chair	68	71	67	72	70	75	62	75	64	72	59	70
9	Working surfaces	66	69	64	71	66	68	62	72	62	71	60	68
10	Size	59	62	57	63	59	64	55	64	55	66	50	59
11	Ability to adjust your work surface, chair, and storage space to suit your work requirements	58	59	58	60	57	65	55	63	54	63	52	58
12	Heat, air conditioning, and ventilation	57	62	54	64	56	61	52	61	55	63	48	59
13	Storage space for working materials	55	55	56	54	59	55	59	59	53	59	51	58
14	Storage space for personal things	54	56	53	54	56	50	58	58	50	60	45	55
15	Ability to concentrate without noise and other distractions	49	51	47	51	48	57	45	57	42	57	32	46
16	Visual privacy	45	50	40	55	46	45	35	61	32	55	22	40
17	Conversational privacy	42	46	39	51	41	44	35	57	30	54	21	35

Scoring: Excellent = 100, Pretty good = 67, only fair = 33, Poor = 0

Observation:

The implications for office planners and designers here are very straightforward: no matter what kind of office is being planned, a great deal of attention has to be paid to the issue of limiting noise and other distractions in office. Not only is it considered the single most important aspect of the office in terms of contributing to job performance, but it is also one of the few functional aspects office workers now feel aren't adequate.

Linked with the issue of noise and other distractions is "conversational privacy." Private offices more often satisfy this need. Planners and designers concerned about placing executives/managers/supervisors or professionals in semi-private offices or in some form of open plan office must be especially careful to provide for conversational privacy in order to meet the needs of these workers. It is a good deal less important to secretaries and to clerical workers, but it should also be kept in mind that a perceived lack of conversational privacy is a potential source of dissatisfaction to most office workers.

Looking at differences between priorities and ratings (in this case, by looking at differences in rankings), there are two characteristics in the middle ground where office workers perceive improvements are needed:

- "Ability to adjust your work surface, chair and storage space to suit your work requirements," ranked 6th in importance and a lower 11th as a positive characteristic of office workers' personal workspaces; and
- "Storage space for working materials," ranked 9th in importance and 13th in ratings.

As far as office furniture is concerned, therefore, office planners and designers usually adequately meet employee needs for working surfaces and for comfort and back support in chairs, but additional attention to flexibility and storage space for tools, equipment and materials would be appreciated by office workers.

On the positive side, "access to tools, equipment, and materials," not only an important characteristic of an office *but also a highly ranked consideration* in a job to most office workers, is rated highly.

Office workers' offices — the way they look.

Priorities: An even 50% of office workers single out a "neat and well organized look" as one of the two or three characteristics that seem most important to them when they think of the way their personal workspaces look. This attribute is chosen somewhat more often by female office workers, by clerical workers, by secretaries, and by office workers in open plan offices, but it maintains a first-rank position for all groups.

Almost as important to professional workers and to male office workers is "amount of privacy." Lower percentages of female office workers, secretaries and clerical workers, those who share offices, and those in pool offices feel it is one of the two or three most important aesthetic characteristics. In fact, office workers who share office space give "overall amount of personal space" equal priority with "amount of privacy," as do occupants of "pool" offices. Professionals also place priority on the amount of personal space they need.

The next most frequently mentioned quality of an office is "the way it reflects the personality of the person working there," important to 20% of office workers. (Slightly more workers in conventional or private offices, and professional office workers say this is important.)

The materials and style of office furniture are both ranked 5th in priority, with slightly greater percentages of workers in pool offices, secretaries, and clerical workers perceiving these as important.

Ranked 7th and 8th are "how up-to-date it is" and "how much it impresses visitors." (More workers in pool offices, secretaries, and clerical workers again single out "how up-to-date it is.")

Less than 10% of office workers single out "paintings, posters or other wall decorations," "color of walls or partitions," "type of floor covering," and "use of plants" as important in the way an office looks. More secretaries feel strongly about wall decorations and plants. And, very generally, women office workers tend to show concern for color of walls or partitions and the use of plants in the office more often than do men.

Table IV-6

Q.10b: Which 2 or 3 of these characteristics seem most important to you when you think of the way your personal workspace looks?

			Sex		Job Type				Type of Office				
Rank	(Number of respondents)	Total (1047)	Male (458)	Female (589)	Executive/ Manager/ Supervisor (245)	Professional (319)	Secretarial (121)	Clerical (274)	Private (473)	Shared (570)	Conventional (405)	Pool (148)	Open Plan (318)
		%	%	%	%	%	%	%	%	%	%	%	%
1	Neat and well organized look	50	44	55	51	42	66	55	49	52	50	49	53
2	Amount of privacy	31	40	25	39	40	27	18	36	27	32	29	31
3	Overall amount of personal space	26	31	22	22	31	22	24	23	28	25	28	25
4	The way it reflects the personality of the person working there	20	21	20	17	25	18	20	23	18	22	18	20
5	Materials used for desks, tables, and chairs	18	14	21	18	12	25	23	18	18	15	26	20
5	Style of desks, tables, and chairs	18	17	19	14	17	21	21	17	19	18	22	17
7	How up-to-date it is	16	16	16	16	10	19	18	14	17	16	18	13
8	How much it impresses visitors	10	11	10	11	11	10	10	9	11	12	5	10
9	Paintings, posters, or other wall decorations	9	9	10	9	10	16	9	10	9	11	7	7
10	Color of walls or partitions	8	6	10	7	9	8	9	8	8	8	7	9
11	Type of floor covering	6	6	7	8	7	4	5	7	6	7	9	7
11	Use of plants	6	3	7	3	6	10	7	5	6	5	6	5
	All (vol.)	2	1	2	2	1	2	2	2	2	2	1	1
	None	1	2	1	1	1	1	1	1	1	1	1	1
	Not sure/no answer	5	6	4	6	5	2	4	4	5	6	4	4

Observation:

- Anything office planners and designers do that makes it easier for office workers to maintain a "neat and well organized" look in their workspaces will meet with enthusiasm.
- Careful attention should be paid to the amount of privacy given executives/managers/supervisors and professionals.
- More important than privacy for many types of office workers, especially clerical workers and those who share offices, is attention to "the amount of personal space."
- The materials and the style of office furniture are now more than satisfactory to most office workers.
- Finally, it should be noted that the basic aesthetic requirements of office workers are qualities that are not always thought of as aesthetic, but which obviously contribute a great deal to the way office workers perceive their offices. The six attributes discussed above — neatness, privacy, personal space and personalization, materials and style of office furniture — are more important than wall decorations or wall color, floor coverings and plants.

Ratings of workspace.

Most office workers approve of the "materials" and of the "style" of their desks, tables and chairs. Most also approve of the type of floor covering in their offices, of how up-to-date they are, and of the color of walls and partitions. Somewhat fewer give their offices credit for a "neat and well organized look" and for the "overall amount of personal space."

On the other hand, they tend to rate their offices "only fair" or "poor" on 5 attributes: "how much they impress visitors," "the way they reflect the personality of the person working there," the "amount of privacy," "paintings, posters, or other wall decorations," and "use of plants."

More women in the office tend to rate their offices highly than do men for "style" of office furniture, for "how up-to-date it is," for a "neat and well organized look," for "how much it impresses visitors," and, most dramatically different between the sexes, for "use of plants." Men, on the other hand, tend to be more approving of the "type of floor covering" and the "amount of privacy" they have.

Greater percentages of secretaries approve of all these aesthetic attributes than do other office workers, while clerical workers are as a whole more often negative.

The same holds true for office workers in private offices as opposed to those who share. Office workers in private offices are consistently more positive than those who share their offices.

Workers in pool offices are again consistently more negative, and give high ratings to only two aesthetic aspects of their offices, both of which concern office furniture — the materials and style of their desks, tables, and chairs.

Looking at differences in ratings by workers in conventional versus open plan offices, these are the most obvious:

- A 16-point gap between the 49 score in conventional offices and 33 score in open plan who rate the "amount of privacy;"
- A similar 11-point gap in scores on "the way it reflects the personality of the person working there;"
- A 10-point gap on "paintings, posters, or other wall decorations;"
- A 9-point difference in "overall amount of personal space;" and
- 6-point and 5-point differences, respectively, on the color of walls and partitions and type of floor covering.

There are no significant differences between workers in conventional and open plan offices on office furniture, both materials and style, on how up-to-date they are perceived to be, and on the use of plants in the office.

Ratings of aesthetic aspects of personal workspace (scores).

Table IV-7

Q.10a: Now, how would you rate your own personal workspace on these general characteristics — excellent, pretty good, only fair, or poor?

			Sex		Job Type				Type of Office				
Rank		**Total**	**Male**	**Female**	**Executive/ Manager/ Supervisor**	**Professional**	**Secretarial**	**Clerical**	**Private**	**Shared**	**Conventional**	**Pool**	**Open Plan**
1	Materials used for desks, tables and chairs	66	65	66	69	65	70	64	71	62	70	63	68
2	Style of desks, tables and chairs	61	60	63	64	61	67	59	66	57	66	53	64
3	Type of floor covering	56	59	54	61	55	63	54	61	52	62	46	57
4	How up-to-date it is	54	52	56	58	51	61	53	61	49	58	45	57
4	Color of walls or partitions	54	54	54	58	53	61	52	58	50	60	45	54
6	Neat and well organized look	52	49	54	57	48	61	50	57	48	58	42	54
6	Overall amount of personal space	52	54	50	56	53	55	47	59	46	59	43	50
8	How much it impresses visitors	43	41	45	47	42	53	40	50	39	49	33	45
9	The way it reflects the personality of the person working there	42	43	42	44	42	51	37	49	36	50	28	39
10	Amount of privacy	39	43	35	43	40	42	31	55	25	49	15	33
11	Paintings, posters, or other wall decorations	36	35	37	43	35	47	31	44	30	44	21	34
11	Use of plants	36	27	43	37	34	48	36	41	32	40	26	38

Scoring: Excellent = 100, Pretty good = 67, Only fair = 33, Poor = 0.

Perceptions of status — what distinguishes an executive office.

One issue in office planning and design that persists is the problem of status in the office, and the degree to which status is reflected in the type of office to which an office worker is assigned.

The cross-section of office workers was asked to select the two or three features which distinguish executive offices from those of other office workers.

Among office workers who are not now executives (who identify themselves as "supervisory" or "regular" level workers), the characteristics which most often connote executive status are "amount of privacy" and "style of desks, tables and chairs."

Among management-level office workers, however, "style of desks, tables, and chairs" is mentioned by a greater percentage than is "amount of privacy" or "overall amount of personal space."

In general, those office workers who share office space are more likely to give as much weight to privacy as to style of office furniture; secretaries pay more attention to the amount of privacy in an executive office than do office workers in other jobs.

Two other significantly visible characteristics are "paintings, posters, and other wall decorations" and "materials used for desks, tables, and chairs." Management-level office workers are more likely to notice "how much it impresses visitors" and "the way it reflects the personality of the person working there" than are other office workers.

Table IV-8

Q.10c: Finally, which 2 or 3 characteristics do you feel usually make the working areas of senior executives seem different from other areas of an office?

		Job Level			Job Type				Type of Office				
(Number of respondents)	Total (1047)	Management (221)	Supervisory (205)	Regular Worker (597)	Executive/ Manager/ Supervisor (245)	Professional (319)	Secretarial (121)	Clerical (274)	Private (473)	Shared (570)	Conventional (405)	Pool (148)	Open Plan (318)
	%	%	%	%	%	%	%	%	%	%	%	%	%
Style of desks, tables, and chairs	34	37	33	33	35	36	37	32	35	33	35	37	33
Amount of privacy	33	29	34	34	28	34	41	31	30	35	29	39	35
Overall amount of personal space	29	29	27	29	24	34	26	29	30	28	27	26	32
Paintings, posters, or other wall decorations	27	23	26	29	24	28	32	28	28	27	28	29	26
Materials used for desks, tables, and chairs	26	24	22	27	24	25	29	24	29	23	26	20	28
Type of floor covering	21	20	21	22	20	22	20	22	21	22	22	26	19
How much it impresses visitors	21	25	22	19	24	22	22	14	21	21	24	18	17
Neat and well organized look	15	11	15	16	13	14	13	18	15	14	14	21	11
Color of walls or partitions	12	10	8	15	10	11	12	16	11	14	10	18	13
The way it reflects the personality of the person working there	12	17	11	11	14	12	12	11	13	12	13	14	9
How up-to-date it is	9	10	10	9	7	9	12	9	9	9	10	7	8
Use of plants	9	3	10	11	6	11	8	11	8	10	7	12	11
All	3	1	4	4	4	2	3	3	2	4	2	3	4
None	2	1	2	2	2	2	3	1	3	2	2	1	3
Not sure/no answer	6	10	4	5	8	4	2	7	5	6	7	5	4

A "psychological profile" of the office.

The two words that majorities of office workers choose to describe the offices in which they work — that is, their overall office environments — are "functional" and "friendly." Male office workers, executives/managers/supervisors and professionals are more likely to describe their offices as "functional" than "friendly." Female office workers, secretaries and clerical office workers, on the other hand, are more likely to term their offices "friendly." Office workers in open plan offices chose "functional" more often than average. However, strong pluralities of office workers in all categories say these two words are among the two or three that best describe their offices.

More than 20% of office workers also mention "interesting," "comfortable," "modern" (27% of office workers in open plan office single this characteristic out, as opposed to 24% in conventional and 14% in pool offices); and two terms with negative connotations — "just a place to work" (30% of clerical workers and 31% in "pool" offices feel that way) and "ordinary."

Words and phrases with fewer than 10% mentions are "unfriendly," "uncomfortable," "not functional," "cold," "boring," "shabby" and "confining."

The only two words with positive connotations mentioned by less than 10% are "impressive" and "stylish." Secretaries and those in private offices, however, are more likely to perceive their office environments as "impressive" than are other office workers.

Office workers in pool offices are more likely than others to perceive their offices as "just a place to work," "ordinary," "out-of-date," "not at all like me," "confining," "shabby," "boring," and "uncomfortable," as well as "open."

Table IV-9

Q.12c: Here is a card with some words or phrases some people have used to describe the offices in which they work. Which two or three of these words or phrases do you feel best describe the way you feel about your overall office environment?

		Sex		Job Type				Office Type				
(Number of respondents)	Total (1047)	Male (458)	Female (589)	Executive/ Manager/ Supervisor (245)	Professional (319)	Secretarial (121)	Clerical (274)	Private (473)	Shared (570)	Conventional (405)	Pool (148)	Open Plan (318)
	%	%	%	%	%	%	%	%	%	%	%	%
Functional	56	61	52	57	61	53	47	59	53	55	50	58
Friendly	51	43	56	47	44	61	57	49	52	54	42	48
Comfortable	30	30	29	32	29	28	31	34	26	40	16	29
Interesting	24	16	31	19	19	36	30	25	24	29	18	22
Modern	22	21	23	23	19	28	23	25	21	24	14	27
Just a place to work	22	20	24	20	18	20	30	16	27	19	31	20
Ordinary	21	23	20	22	24	20	21	21	22	20	26	20
Open	17	17	18	18	18	14	20	16	18	14	24	20
Suits my personality	14	13	15	13	12	19	16	16	12	18	8	13
Out of date	13	16	12	13	15	10	10	8	17	10	21	11
Home away from home	12	11	13	15	12	13	11	15	9	16	7	10
Warm	11	9	13	14	8	12	12	13	9	12	7	11
Not at all like me	10	9	11	6	12	7	12	8	12	8	19	9
Impressive	9	8	10	9	7	14	9	12	7	12	3	9
Confining	9	7	9	9	8	7	9	7	10	7	10	8
Shabby	8	7	8	8	9	7	7	5	10	4	12	10
Boring	7	7	6	5	7	4	9	5	8	6	10	6
Cold	6	6	5	4	8	7	5	5	7	4	9	7
Not functional	6	5	6	6	6	5	5	4	6	4	9	6
Uncomfortable	5	4	5	4	7	2	5	4	6	4	10	4
Stylish	4	3	5	4	3	8	4	8	1	5	2	5
Unfriendly	1	1	1	1	2	2	1	2	1	1	1	1

Overall satisfaction with offices — now, and over the past five years.

Overall, a very high 74% of office workers say they are "very" or "somewhat" satisfied with their personal workspaces. Repeating what is by now an obvious pattern, those who have private offices are by far the most satisfied group — 81% are satisfied — and more office workers in conventional offices are satisfied (80%) than those in open plan offices (74%) or in pool offices (64%).

Moreover, 72% of office workers perceive that their fellow office workers are "very" or "somewhat" satisfied with their overall office environment. Again, this percentage is significantly lower among workers in pool offices, a slimmer 58% majority of whom feel that their fellow office workers are satisfied with their overall office environment.

Less encouraging for office planners and designers is the fact that by 42-36%, a plurality of office workers feel that their personal satisfaction with their office environment over the past five years has stayed the same rather than increased. However, the fact that over one-third of office workers have noticed improvements in their office environment is not insignificant. (Slightly less than one-third of clerical workers and office workers who share offices feel that way, and, again, significantly fewer in pool offices have seen improvements.)

A much smaller 19% feel that their satisfaction with their office environment has decreased, although this pecentage rises among professional workers (24%), and workers who share or are in pool offices (23% and 28%), and among workers in open plan offices (22%).

There are three primary reasons for a decrease in satisfaction with the office environment over the past five years: "failure to update, maintain office facilities; drab or unpleasant surroundings," "not enough space, an inadequate work area," and "not enough privacy."

Those office workers who share offices more frequently cite these as explanations for their decreased satisfaction. These reasons also account for the dissatisfaction of professional workers. Workers in open plan offices suffer space and privacy complaints in greater numbers than do workers in conventional offices. Workers in pool offices have yet another more frequent complaint, and that is "unpleasant co-workers."

Satisfaction with personal workspaces.

Table IV-10

Q.11b: Overall, how satisfied would you say you are with your personal workspace — very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?

		Type of Office				
(Number of respondents)	Total (1047)	Private (473)	Shared (570)	Conventional (405)	Pool (148)	Open Plan (318)
	%	%	%	%	%	%
Satisfied	74	81	68	80	64	74
Dissatisfied	26	19	31	19	36	26
Not sure/no answer	-	-	1	1	-	-

Note: "Satisfied" is the sum of "very satisfied" and "somewhat satisfied," "dissatisfied" is the sum of "somewhat dissatisfied" and "very dissatisfied."

Perception of fellow employees' satisfaction with overall office environment.

Table IV-11

Q.12d: If you had to say, would you say that the employees in your organization are in general very satisfied, somewhat satisfied, somewhat dissatisfied or very dissatisfied with your company or organization's offices?

		Type of Office				
(Number of respondents)	Total (1047)	Private (473)	Shared (570)	Conventional (405)	Pool (148)	Open Plan (318)
	%	%	%	%	%	%
Satisfied	72	74	70	77	58	73
Dissatisfied	27	25	28	22	41	26
Not sure/no answer	2	1	2	1	1	1

Note: "Satisfied" is the sum of "very satisfied" and "somewhat satisfied," "dissatisfied" is the sum of "somewhat dissatisfied" and "very dissatisfied."

Change in personal satisfaction with office environment over past five years.

Table IV-12

Q.13a: In general, has your personal satisfaction with your office environment increased, decreased, or stayed the same over the past five years? (IF RESPONDENT INDICATES HE OR SHE HAS WORKED LESS THAN FIVE YEARS, CHECK BELOW AND ASK:) Well then, has it increased, decreased, or stayed the same since you've been working? (CHECK "WORKED LESS THAN 5 YEARS" AND RECORD AS USUAL.)

		Job Type				**Type of Office**				
(Number of respondents)	**Total (1047)**	**Executive/ Manager/ Supervisor (245)**	**Professional (319)**	**Secretarial (121)**	**Clerical (274)**	**Private (473)**	**Shared (570)**	**Conventional (405)**	**Pool (148)**	**Open Plan (318)**
	%	%	%	%	%	%	%	%	%	%
(Worked less than 5 years)	(23)	(18)	(20)	(22)	(29)	(18)	(27)	(20)	(20)	(25)
Increased	36	40	35	40	32	41	31	41	26	36
Decreased	19	18	24	14	16	15	23	14	28	22
Stayed the same	42	40	39	43	47	42	42	42	42	40
Not sure	1	2	1	1	1	-	2	1	1	1

Reasons for increase in satisfaction with office environment.

Table IV-13

Q.13b: Why has your satisfaction with your office environment increased?
(Base: Satisfaction with office environment has changed over past five years.)

		Job Type				Type of Office				
(Number of respondents)	**Total** (572)	**Executive/ Manager/ Supervisor** (140)	**Profes-sional** (186)	**Secre-tarial** (65)	**Cler-ical** (132)	**Private** (264)	**Shared** (306)	**Conven-tional** (220)	**Pool** (79)	**Open Plan** (183)
	%	%	%	%	%	%	%	%	%	%
Increased										
Improved office environment, e.g., remodeled, repainted, refurnished, more functional	21	21	19	25	23	25	18	22	15	23
Better/more relaxed atmosphere, friendly people	12	9	9	12	22	12	13	15	14	9
More space/room	12	14	14	12	8	13	12	16	6	10
New/modern/adequate office equipment, furnishings	11	15	11	11	9	12	11	10	10	13
Better location, have changed location	10	11	12	8	10	13	8	11	4	11
More privacy; own office, working space defined, e.g., partitions	10	14	13	11	5	14	7	15	-	10
Enjoy/like job; satisfied with work, have more responsibility	10	9	7	8	17	9	11	11	13	9
New/up to date/modern offices, building	8	11	6	11	8	10	7	10	8	9
Been promoted; in area/position more in line with my interests	4	6	3	9	2	6	3	5	4	2
Less noise/distraction	3	5	3	5	2	4	3	4	-	3
Better qualified/more knowledgeable co-workers	2	4	1	2	3	2	3	3	4	2
Work with fewer people, only other person	1	1	1	-	1	1	1	1	-	1

Reasons for decrease in satisfaction with office environment.

Table IV-14

Q.13b: Why has your satisfaction with your office environment decreased?
(Base: Satisfaction with office environment has changed over past five years.)

		Job Type				Type of Office				
(Number of respondents)	**Total (572)**	**Executive/ Manager/ Supervisor (140)**	**Profes-sional (186)**	**Secre-tarial (65)**	**Cler-ical (132)**	**Private (264)**	**Shared (306)**	**Conven-tional (220)**	**Pool (79)**	**Open Plan (183)**
	%	%	%	%	%	%	%	%	%	%
Decreased										
Failure to up-date/maintain office facilities; drab unpleasant surroundings	13	14	16	11	9	9	16	11	18	13
Not enough space, inadequate work area	12	11	16	5	11	8	15	9	20	12
Not enough/lack of privacy	5	4	9	2	2	4	6	3	6	8
Management uninterested/unappreciative of quality of work	5	3	4	6	7	4	5	1	5	6
No respect for management	3	1	5	-	3	2	4	1	5	4
Boring/monotonous routine work	2	1	2	2	2	1	2	-	5	3
Unpleasant co-workers	2	1	2	2	2	2	1	-	9	1
Low salary	1	1	1	-	2	1	1	-	4	1
Better workers expected to pick up slack, hide deficiencies of others	1	-	-	2	2	-	1	-	1	1

The most desired office improvements.

When office workers are asked what two or three things they would most like to change in their personal workspaces if they had a say in planning a new space or selecting new equipment, there are two requests frequently mentioned:

- Among office workers who share their offices, those in pool offices and in open plan offices, approximately one-third mention that they would like "more privacy, to be separated from others in the office, or to have my own office."
- Almost the same number volunteer "more personal space, a larger space."
- Fewer office workers who do not now share their offices mention a need for personal space or privacy, but a surprising 26% who are now alone in their workspaces would like more personal space.

A generally "more attractive, neater, better organized, more pleasing" office is mentioned by 14% of office workers, as is another "type of desk — more modern, larger, or just better." Twelve percent mention a change in the color of walls or partitions, and 12% mention a new carpet or other type of floor covering.

Better office furniture in general, another type of chair, more storage space, and wall decorations are each mentioned by 10%. Slightly smaller pecentages mention plants and "office accessories (e.g. calculators, electric staplers, etc.)."

Another 10% volunteer "nothing, no complaints." This percentage is higher among office workers who have private offices (12%) and in conventional offices (10%). Fewer office workers in pool offices (5%), in open plan offices (8%), and who share offices (8%) have no complaints.

Office workers in pool offices more often want to see changes in overall attractiveness and in the color of the walls.

Open plan office workers, significantly, mention a need for overall neatness and attractiveness no more often than do workers in conventional offices, and mention less often changes in color of walls or partitions, new office furniture, and plants. They do, however, mention much more frequently the need for more personal space or privacy.

Most desired changes in personal workspaces.

Table IV-15

Q.11a: If you had a lot of say in planning a new office space or selecting new office equipment for yourself, what two or three things would you most like to change in your personal workspace?

		Type of Office				
(Number of respondents)	**Total (1047)**	**Private (473)**	**Shared (570)**	**Conventional (405)**	**Pool (148)**	**Open Plan (318)**
	%	%	%	%	%	%
More personal space/work-area space; large space/room	28	26	29	23	30	34
More privacy, separated from others in office; want my own office	26	21	31	20	35	36
A more attractive office; neater, better organized, pleasing appearance	14	12	16	13	18	12
Desk: modern/size/style/better best, etc.	14	12	15	14	11	14
Change color of office/walls/paint	12	12	12	14	19	9
A nice carpet, new carpet/rug/floor covering	12	12	12	11	9	13
Paintings/pictures/wall decorations	10	11	10	12	11	10
More storage space/cabinets/shelves/closet space	10	10	10	10	11	9
Furniture: up-to-date, newer, matching, better quality	10	11	10	13	10	9
Chairs: newer/modern style, swivel, more comfortable, etc.	10	9	11	10	10	10
Plants, more plants	9	8	10	11	9	8
Office accessories: calculators, electric staplers, paperweights, etc.	8	7	9	7	9	7
Nothing/no complaints	10	12	8	11	5	8
Do not know	8	9	7	9	9	6

Note: Answers with less than 8% mentions are not included in this table.

Chapter V

Office Planners and Designers: Planning and design criteria.

A. Objectives:

The interviews with the two executive samples — corporate office planners/specifiers and office design professionals — had a twofold purpose. The first was to determine the priorities for office design and planning as set by decision-makers, and the second was to compare these with the needs and priorities of office workers. In this section, the overall criteria for updating or planning new offices will be discussed, comparing the attitudes of business executives and of architects and designers. Then the way these decision-makers feel about the office environment, its effect on productivity, and their perception of the functional and aesthetic priorities of office workers will be compared with previous findings about the actual preferences of the cross-section of office workers.

B. Summary:

Corporate office decision-makers from the Fortune 1300 corporations estimate that 40% of their organizations' office facilities have undergone renovation or relocation over the past five years, and expect that another 30% will be modernized or relocated in the next five years.

"Expansion of the office work force," both office design professionals and business executives agree, is the most important reason behind management decisions to update office spaces. A "desire for increases in the work output of office employees," however, is ranked a high 3rd as a reason by the two executive groups.

There is widespread agreement that an employee's satisfaction with his or her office surroundings affects job performance, with 96% of business executives and 95% of design professionals agreeing that there is a "great deal" or "only some" connection. Similarly, 92% of office workers feel that their personal satisfaction with their office surroundings affects their job performance.

When asked what two or three characteristics they feel most office workers would single out as most important to job performance, both groups tend to overestimate the relative importance of office size, storage space for personal things, the flexibility of office furniture, visual privacy, and job specificity. At the same time, they tend to underestimate the priorities given by office workers to overall lighting, conversational privacy, work surfaces, access to other areas and departments, and accessibility of tools, equipment, and materials.

In estimating the importance to office workers of various aesthetic characteristics of the office, business executives and designers slightly overestimate the importance of "overall personal space" and "type of floor covering." Design professionals more seriously overestimate the importance of wall color. They tend to slightly underestimate the importance to office workers of a "neat and well organized look," "amount of privacy," and "materials" used in office furniture.

On the other hand, these office decision-makers are fairly accurate when estimating what most office workers see as setting executive offices apart from other offices, correctly identifying "amount of personal space," "style of desks, chairs, tables," and "amount of privacy" as the top three distinguishing characteristics. They incorrectly feel, however, that executives pay considerably less attention to the style of office furniture than management-level office workers actually do when considering an executive office, and tend to overestimate the importance to management-level workers of how impressive the office is to visitors, a neat look, and the way the office reflects the personality of the individual working in it.

Both groups underestimate the extent of employee satisfaction with the office environment at present — design professionals more seriously than corporate executives — and both overestimate the extent of increase in satisfaction over the past five years.

"Studying exactly what people do on the job and reorganizing what they do so that the work flows smoothly from person to person and from department to department" is considered by business executives and office workers to be the most likely of 11 possible changes in the office to increase productivity. Although it is ranked only 3rd in potential effectiveness by design professionals, a substantial 85% agree that it is likely to increase productivity.

Business executives and designers also agree with office workers that "cutting down on noise and distraction in the office" would have a positive effect on productivity.

However, office workers are more likely to feel that a share in profits or a bonus for punctuality and attendance would increase productivity than are business executives or design professionals, and somewhat less likely to feel that new office layouts or new office equipment are effective productivity measures.

Business executives are inclined to emphasize investment in new office electronic and data processing equipment, and more design professionals recommend studying and filling specific job needs for work surfaces, chairs, lighting and storage space.

Office renovation and relocation.

On average, the business executives interviewed in this study (office decision-makers for the largest 1300 corporations, ranked by sales, assets or operating revenues by Fortune magazine) estimate that 40% of their organizations' office facilities nationwide have undergone renovation or relocation in the past five years, and they estimate that another 30% will be modernized or relocated in the next five years. A 53% majority say that from 1% to 25% of their office facilities now need renovation or updating.

Corporate office renovation and relocation.

Table V-1

Q.1a: Let's start off by talking in general about your company's *office facilities nationwide* — that is, not including, for example, manufacturing, warehousing, or retail floor space — and considering them in the aggregate. What percentage of your company's total office space would you estimate has undergone major renovation or relocation in the past 5 years?

Q.1b: If you had to say, what percentage of your office space would you say is likely to be renovated or relocated in the next 5 years?

Q.1c: And what percentage would you estimate now needs renovation or updating?

(Number of respondents)	Business Executives (209)		
Percentage of total office facilities nationwide in respondent organization:	Renovated or Relocated Past 5 Years	Renovated or Relocated Next 5 Years	Now Needs Renovation or Updating
	%	%	%
None	5	6	15
1-25%	34	48	53
26-50%	27	28	17
51-99%	25	13	9
100%	6	3	1
Not sure/no answer	3	4	5
Mean percentage of office facilities	40	30	22

Factors important in updating office space.

Both the business executive group and the architects and designers agree that "expansion of the office work force" is the most important reason behind most management decisions to update office spaces. Ranked equally high by architects and designers, however, is "rising contruction costs." Business executives put construction costs much lower on their list of reasons — ranking this 7th.

Also rated extremely important by design professionals are the "need for more flexible office layouts," the "desire to increase the work output of office employees," the "need for better communication between departments," and "reorganization of personnel or departments within a company."

Business executives also add to the top half of the list "changes in spatial needs due to increased or new reliance on electronic and data processing equipment." While rated highly as a reason for change by design professionals, they give it a relative priority of 10th of 15, compared with the 5th place position given by the executives.

Other differences between the two groups are in the relative priorities of "rising cost of heating and air conditioning" (rated somewhat higher by design professionals), "the need for more space per employee" (more important to business executives) and "the need for more efficient storage space" (more significant to design professionals).

Table V-2

Q.2b/2c: Here are some factors which business leaders feel are important in management decisions to update office spaces. On a scale of from "1" for "extremely important" to "4" for "very unimportant," I'd like you to rate each of these factors in terms of how important it is in your firm's (most firms') decision(s) to update.

	Business Executives		Architects and Designers	
	Score*	Rank	Score	Rank
Expansion of office work force	72	1	78	1
Reorganization within the company of personnel assignments and/or departmental relationships	70	2	70	6
Desire to increase work output of office employees	66	3	76	3
Need for better communication between departments	62	4	75	5
Change in type of spatial needs due to increased or new reliance on electronic and data processing equipment	58	5	68	10
Need for more flexible office layouts	58	5	76	3
Rising construction costs	56	7	78	1
Desire for more pleasant surroundings for employees	55	8	69	7
Rising cost of heating and air conditioning of office space	46	9	69	7
Need for more space per employee	45	10	56	14
Need for more efficient storage space	44	11	69	7
Availability of new types of office systems	44	11	58	13
Rising cost of lighting office space	42	13	64	11
Need for more accessible storage space	39	14	61	12
Reduction of office work force	26	15	40	15

*Scoring values: Very important = 100, somewhat important = 67, not too important = 33, not at all important = 0

Job performance and the office environment.

Asked directly about how much of a connection they feel there is between an employee's satisfaction with his or her office surroundings and his or her doing a job well, 75% of office design professionals and 53% of business executives who make office planning decisions say they feel there is a "great deal" of a connection. Another 43% of business executives and 20% of design professionals say it has "only some" effect.

In total, 96% of business executives, 95% of architects and designers, and, as discussed previously, 92% of office workers themselves feel that job performance is affected by the office environment.

Table V-3

Q.6e: In general, how much of a connection do you feel there is between an employee's being satisfied with his or her office surroundings and his or her doing a job well? Do you feel satisfaction with office surroundings affects doing a job well a great deal, only some, or hardly at all?

	Perception Of Employee's Satisfaction		Employee's Actual Satisfaction
(Number of respondents)	**Business Executives (209)**	**Architects and Designers (225)**	**Office Workers (1047)**
	%	%	%
Great deal	53	75	57
Only some	43	20	35
Hardly at all	4	4	7
Not sure/no answer	-	-	-

Function, style, and status.

A substantial 62% of business executives feel that proper heat, air conditioning, and ventilation is one of the two or three most important characteristics of an office in helping office workers to get their jobs done well. An even 50% also feel that the "ability to concentrate without noise and other distractions" is important.

Office design professionals place importance on shelter from noise and distraction, and a lesser 40% rank heat, air conditioning, and ventilation 4th of 17 possible characteristics. They rank the "ability to adjust work surface, chair and storage space to suit work requirements" 2nd, and task lighting 3rd. Business executives rank both of these equally, in 3rd place, but smaller percentages feel they are important.

Fifth, 6th, and 7th ranked by both groups are "access to tools, equipment, and materials," "suitability for the work done," and "overall lighting."

Design professionals are more likely to feel that "access to other areas and departments," "storage space for working materials," and "working surfaces" are important to job performance.

Business executives are more likely to feel, in turn, that conversational and visual privacy are important.

When asked what two or three characteristics they feel most office workers would single out as most important to their job performance, both executive groups tend to *overestimate* the relative importance of office size, storage space for personal things, the ability to adjust office furniture to suit work requirements, visual privacy, and suitability for the type fo work done. And both groups tend to *underestimate* the priorities given by office workers to overall lighting, conversational privacy, work surfaces, access to other areas and departments, and access to tools, equipment and other materials.

Professional designers more accurately than corporate office planners gauge the relative importance of task lighting and of chair comfort to office workers.

Table V-4

Q.7a: Here are some functional characteristics that could apply to an office employee's office or workstation. Which 2 or 3 would you say are most important in helping an office employee to get his or her job done well?

Q.7b: Which 2 or 3 do you feel most office employees would single out as most important in helping them do a good job?

(Number of respondents)	**Business Executives (209)**				**Architects/Designers (225)**				**Office Workers (1047)**
	Feel Are Important		**Feel Employees Would Choose As Important**		**Feel Are Important**		**Feel Employees Would Choose As Important**		**Actual Choice As Important**
	%	Rank	%	Rank	%	Rank	%	Rank	Rank
Heat, air conditioning, and ventilation	62	1	52	1	40	4	41	2	2
Ability to concentrate without noise and other distractions	50	2	49	2	52	1	46	1	1
Lighting for the work done	31	3	15	7	42	3	23	4	5
Ability to adjust work surface, chair and storage space to suit work requirements	31	3	28	3	47	2	38	3	6
Access to the tools, equipment, and materials used to work with	29	5	22	5	24	6	21	5	3
Suitability for the type of work done	24	6	15	7	32	5	20	6	12
Overall lighting	18	7	10	11	12	7	8	12	8
Conversational privacy	17	8	19	6	8	11	19	7	4
Visual privacy	10	9	13	9	7	14	12	10	13
Access to other areas and departments	10	9	8	13	12	7	7	14	6
Size	9	11	23	4	8	11	17	9	13
Storage space for working materials	8	12	11	10	12	7	9	11	9
Comfort of chair	8	12	9	12	9	10	18	8	9
Working surfaces	5	14	4	15	8	11	4	15	9
Back support of chair	3	15	2	16	4	15	4	15	15
Safety	2	16	1	17	1	16	2	17	16
Storage space for personal things	-	17	5	14	1	16	8	12	17

Style — the way the office looks.

Business executives and designers slightly overestimate the importance of "overall personal space" and "the type of floor covering" to office workers in the way that their offices look. Business executives somewhat, and design professionals to a greater degree, overestimate the importance of the color of walls or partitions.

On the other hand, both groups tend to estimate that a "neat and well organized look" is not necessarily the premier requirement of office workers — which it is — and tend to feel that office workers place much less importance on the materials of which their office furniture is made than on the style of office furniture, both of which are in fact ranked generally high in importance by office workers. Again, there are slight underestimates of the importance of the amount of privacy, with design professionals most seriously underestimating this need.

Architects and designers do, however, more accurately gauge the importance of the "way an office reflects the personality of the person working there" and "paintings, posters and other wall decorations" to office workers.

Observation:

The discrepancy between the estimates of business executives and, more significantly, of design professionals and the actual perceptions of the office public occurs again in the area of privacy. Design professionals should also keep in mind that color is not one of the two or three most important aesthetic characteristics to office workers, and business executives should be careful that the needs of office workers for offices that can reflect in some way the personality of an individual are considered.

Table V-5

Q.8a: Which 2 or 3 of these characteristics do you think would seem most important to most office workers when they think of the way their personal workspaces look?

(Number of respondents)	Business Executives (209)		Architects and Designers (225)		Office Workers (1047)
	Feel Most Employees Would Choose as Important		Feel Most Employees Would Choose as Important		Actual Choice as Important
	%	Rank	%	Rank	Rank
Overall amount of personal space	45	1	44	1	3
Neat and well organized look	39	2	36	2	1
Amount of privacy	31	3	25	5	2
Style of desks, tables, and chairs	28	4	21	6	5
How up-to-date it is	26	5	16	8	7
The way it reflects the personality of the person working there	24	6	28	4	4
Color of walls or partitions	23	7	34	3	10
Materials used for desks, tables, and chairs	16	8	17	7	5
How much it impresses visitors	15	9	11	11	8
Type of floor covering	15	9	16	8	11
Paintings, posters, or other wall decorations	11	11	16	8	9
Use of plants	6	12	11	11	11

Status — perceptions of the executive office.

Both executive groups, business executives and design professionals, are correct in identifying "amount of personal space," "style of desks, tables, and chairs" and "amount of privacy" as the three characteristics most likely to differentiate, among office workers, executive offices from other areas of an office, although design professionals are more likely to correctly estimate the relative importance of "style" and "amount of personal space."

Both executive groups, however, underestimate the importance of wall decorations to office workers' perceptions of executive offices. ("Paintings, posters or other wall decorations" is 4th ranked as a distinguishing characteristic.) They incorrectly estimate that the materials of office furniture, and how much the office impresses visitors are more important than paintings in workers' perceptions.

Table V-6

Q.8b: Which 2 or 3 of these characteristics do you think most office employees would feel usually make the working areas of senior executives seem different from other areas of an office?

(Number of respondents)	Business Executives (209)		Architects and Designers (225)		Office Workers (1047)
	Feel Most Employees See as Different		Feel Most Employees See as Different		Actual Perception as Different
	%	Rank	%	Rank	Rank
Overall amount of personal space	50	1	40	3	3
Style of desks, tables and chairs	45	2	43	1	1
Amount of privacy	40	3	41	2	2
Materials used for desks, tables and chairs	34	4	40	3	5
How much it impresses visitors	30	5	39	5	6
Type of floor covering	25	6	32	6	6
Paintings, posters or other wall decorations	25	6	20	7	4
The way it reflects the personality of the person working there	13	8	20	7	9
Use of plants	7	9	7	11	11
Neat and well organized look	7	9	8	10	8
Color of walls or partitions	4	11	12	9	9
How up-to-date it is	3	12	5	12	11

How executives perceive office differences.

On the other hand, when their estimates of executives' preferences for their offices are compared with the views of management-level office workers, it can be seen that there are wider variations. Most seriously underestimated is the importance of the style of office furniture, ranked higher as a distinguishing characteristic by management-level workers than privacy, personal space, or how much the office impresses visitors. The office decision-makers tend to overestimate the importance to management-level office workers of a neat and well organized look, and the importance of the way the office reflects the personality of the person working there.

Table V-7

Q.8c: Which 2 or 3 of these characteristics do you think most executives feel are most important in the way their personal offices look?

(Number of respondents)	**Business Executives (209)**		**Architects/ Designers (225)**		**Management-Level Office Worker (221)**
	%	Rank	%	Rank	Rank
Amount of privacy	46	1	43	2	2
How much it impresses visitors	38	2	53	1	4
Overall amount of personal space	37	3	35	5	2
The way it reflects the personality of the person working there	32	4	37	3	8
Style of desks, tables and chairs	31	5	36	4	1
Neat and well organized look	30	6	25	6	9
Materials used for desks, tables and chairs	19	7	23	7	5
Paintings, posters or other wall decorations	14	8	11	10	6
Type of floor covering	13	9	14	8	7
How up-to-date it is	9	10	12	9	10
Color of walls or partitions	3	11	8	11	10
Use of plants	3	11	3	12	12

Perceptions of employee satisfaction with the office environment. Business executives on the average estimate that 66% of office employees are "very" or "somewhat satisfied" with their personal workspaces, and that 19% are "very" or "somewhat dissatisfied." Office design professionals' estimates are much lower — they estimate on average that 48% are "satisfied" and 33% "dissatisfied." Both groups underestimate the extent to which office employees are satisfied with their workspaces — a higher 74% actually say they are very or somewhat satisfied, and 26% are dissatisfied.

Table V-8

Q.6c: From your impression, what percentage of office employees would you estimate to be very or somewhat satisfied with their personal workspaces — that is, the offices or workstations they consider their own working area?

Q.6d: What percentage do you think are somewhat or very dissatisfied with their personal workspaces?

	Mean Estimated % Of Office Workers		Actual Satisfaction % Of Office Workers
	Business Executives	Architects and Designers	
(Number of respondents)	(209)	(225)	(1047)
Satisfied with workspaces	66	48	74
Dissatisfied with workspaces	19	33	26

Perceptions of change in statisfaction with office environment over past 5 years.

On the other hand, substantial majorities in each executive group feel that most office workers would say that their personal satisfaction with their office environment has increased over the past five years. The actual feelings of office workers about the extent of change over the past five years are a good deal more mixed, with those office workers who feel their feelings about their office environment haven't changed much over five years slightly outweighing those who feel their satisfaction has increased.

Table V-9

Q.6a: Thinking some more about your experiences with and perceptions of the preferences of office employees, do you feel that most employees would say their personal satisfaction with their office environment has increased, decreased, or stayed the same over the past 5 years?

	Perception of Most Office Employees' Satisfaction		Employees' Actual Satis-faction
(Number of respondents)	Business Executives (209)	Architects and Designers (225)	Office Workers (1047)
	%	%	%
Increased	63	63	36
Decreased	12	14	19
Stayed the same	22	21	42
Not sure/no answer	2	2	1

Perceived reasons for increased satisfaction with office environment.

Table V-10a

Q.6b: Why do you feel most office employees' satisfaction with their office environment might have increased/decreased over the past 5 years? (Base: Feel employees' satisfaction has changed over past 5 years)

	Perception of Most Employees' Satisfaction		Employees' Satisfaction
(Number of respondents)	Business Executives (157)	Architects and Designers (171)	Office Workers (572)
Reasons for increased satisfaction	%	%	%
Improved office environment (e.g., remodeled, repainted, refurnished, redesigned, more functional)	60	51	21
New/modern/adequate office equipment, furnishings	17	12	11
New/up to date/modern offices, buildings	13	5	8
More space/room	8	5	12
Better/more relaxed atmosphere, friendly people, better treatment of employees	7	10	12
Better location, have changed location	4	-	10
Made improvements and continued because of positive feedback	4	4	-
They have more to say about redecorating now	4	8	-
More privacy: own office, working space defined (e.g., partitions)	3	1	10
More aware of office surroundings, more professional	2	16	-
Enjoy/like job: satisfied with work, have more responsibility	1	2	10
Better qualified/more knowledgeable co-workers	1	-	2

Perceived reasons for decreased satisfaction with office environment.

Table V-10b

Q.6b: Why do you feel most office employees' satisfaction with their office environment might have increased/decreased over the past 5 years? (Base: Feel employees' satisfaction has changed over past 5 years)

	Perception of Most Employees' Satisfaction		Employees' Satisfaction
(Number of respondents)	Business Executives (157)	Architects and Designers (171)	Office Workers (572)
Reasons for decreased satisfaction	%	%	%
Failure to update/maintain office facilities	5	4	13
Not enough space, inadequate work area	4	1	12
Management uninterested/ unappreciative of quality of work	-	1	5
Boring/monotonous/ routine work	-	1	2
Not enough/lack of privacy	1	1	5
Unpleasant co-workers; bad attitude of employees	1	1	2
Office politics, moving people around	2	-	-
Comparison with newer buildings and technologies	1	1	-
Just reorganize old stuff with minimum cost	1	-	-
The ways and means have decreased	1	1	-
Bad open space environment, like a one-to-one relationship	1	1	-
Lack of change and variety	-	1	-

Office productivity.

While there are some important differences as to which of 11 measures tested would be most likely to make office employees more productive, all three groups — business executives, design professionals, and office public — agree that "studying exactly what people do on the job and reorganizing what they do so that the work flows smoothly from person to person and from department to department" is most likely to have a positive effect. A very high 92% of business executives feel that way, 85% of design professionals agree, and a smaller but still substantial 76% majority of office workers feel that, indeed, their own productivity would increase if this kind of reorganization were made.

About the same percentage of business executives feel that "investing in more computer terminals and electronic typing, filing, printing and copying equipment" would have a positive effect on employee productivity. Much smaller percentages of design professionals and office workers feel that this would increase office productivity. (Design professionals and office workers rank this measure 8th and 9th, respectively, as likely to increase work output.)

Both of these executive groups concerned with office planning are more likely than office workers to feel that "rearranging the office so that people who usually work together are located closer to one another and people who only occasionally or never work together are further apart" would be beneficial. This measure is ranked 3rd and 4th of 11 by business executives and design professionals; 6th by office workers.

The executive groups are also likely to be more positive about the effect on productivity of "changing the office design so that employees, supervisors and management are less closed off from one another" — 51% of design professionals and 54% of business executives feel that most employees' productivity would increase with this change; a much smaller 29% of office workers, indeed, feel that their own productivity would likely increase.

Possible changes in the workplace: their prevalence and effect on productivity.

Table V-11

Q.4c: Finally, for each one, I'd like you to tell me what kind of effect you personally feel it would have or has had on the employees of your company (most employees) — would it/did it make them more productive, less productive, or do you feel it would have/has had no effect on productivity to (ITEM)?

	Perception That Employees Would Be More Productive				Employees' Actual Feeling That Would Be More Productive	
	Business Executives		Architects and Designers		Office Workers	
(Number of respondents)	(209)		(225)		(1047)	
	Rating %	Rank	Rating %	Rank	Rating %	Rank
Study exactly what people do on the job and reorganize what they do so that the work flows smoothly from person to person and from department to department	92	1	85	3	76	1
Invest in more computer terminals and electronic typing, filing, printing, and copying equipment	91	2	61	8	52	9
Rearrange the office so that people who usually work together are located closer to one another and people who only occasionally or never work together are further apart	88	3	76	4	54	6
Study exactly what people do on the job and then make sure their work surfaces, chairs, lighting and storage space are what they need to do their jobs	87	4	91	1	62	4
Cut down on the amount of noise and distraction in the office	87	4	86	2	64	2
Let all employees share equally in the profits of the company	64	6	71	5	64	2
Give employees a greater say in how their duties and personal work areas are organized	63	7	68	6	61	5
Let all employees share in the profits of the company with the percentage of share based on how well they do their jobs, as rated by their supervisors	60	8	65	7	54	6
Change the office design so that employees, supervisors, and management are less closed off from one another	54	9	51	10	29	11
Allow some employees to come in earlier and leave earlier and others to come in later and leave later according to the type of job they have and the hours they prefer	51	10	56	9	51	10
Give employees 8 hours' extra pay for every full month they have no late or sick days	35	11	41	11	54	6

Office design professionals are more in favor of "studying exactly what people do on the job and then making sure that their work surfaces, chairs, lighting, and storage space are what they need to do their jobs," and place slightly less emphasis on the study of workflow than do either business executives or office workers.

"Cutting down on noise and distraction," on the other hand, is ranked 2nd by office workers, 2nd by design professionals, and a lower 4th by business executives, although a high 87% of business executives feel that this would increase productivity.

"Letting all employees share equally in the profits of the company," also ranked 2nd by office employees, is ranked 5th by designers and 6th by business executives, although exactly the same percentage of business executives (64%) feel most employees' productivity would increase as office workers feel their own productivity would increase. Office workers also rank "giving employees 'eight hours' extra pay for every full month they have no late or sick days" higher than do either design professionals or business executives. In this case, a majority of office workers are in favor, but no more than 35% of business executives or 41% of design professionals feel it would be effective.

Observation:

Given the fact that the measures that office workers perceive as most likely to increase their productivity are also those that will meet with greater acceptance, office planners and designers should remember that:

- Business executives are more likely to feel that investing in new data processing electronic equipment will be an effective productivity measure than are office workers;
- "Changing office design so that employees, supervisors, and management are less closed off from one another" is not likely to meet with approval in the name of productivity;
- "Giving employees a greater say in how their duties and personal work areas are organized" is more important to their perception of productivity than changes in office location to facilitate traffic and communications;
- "Cutting down on the amount of noise and distraction" in the office is perceived as very important to office workers; and
- Design professionals are likely to push new office furniture as a higher priority than other measures that office workers would find more credible as productivity measures.

Finally, it can be suggested that office planning conducted with a study and reorganization of workflow will be perceived by most office workers as likely to increase their work output.

Chapter VI

Office Politics: Who designs the office?

A. Objectives:

As many companies test new ways of incorporating the opinions of their employees into their policymaking, it becomes appropriate to explore how office workers, corporate office decision-makers and design professionals feel about the adequacy and desirability of employee participation in office planning. Office workers were asked how they feel about participation in these as opposed to other office decisions, how they feel management would react to the idea of their increased participation, and what effect they feel their increased participation would have on office planning. Both executive groups and office workers were asked their perceptions of who now plans and influences, and who, ideally, should plan and influence, the office environment.

B. Summary:

The majority of office workers feel that their having a lot of say in the planning of office spaces and selecting the office equipment they use would have a beneficial effect on their office surroundings.

Specifically, significant numbers of office workers volunteer that their offices would be more comfortable and efficient, that they would feel more involved and that they would be more productive. Only 2% feel that the effect would be negative, saying that too many opinions would be involved.

Moreover, although majorities of supervisory-level and regular workers anticipate that management would be opposed to their increased participation in office planning decisions (management-level workers overall actually are not opposed), over 70% majorities would fight for a more pleasant office environment, a safer office environment, better office furniture, and better tools and equipment.

More office workers feel it is important for them to have a say in "recommending the type of office furniture best for the jobs," "arranging their office furniture in the way that is best for the way you work," and "recommending tools, equipment and other materials" for the job than now feel they have a say in those decisions.

However, a small 19% perceive that employees now have a say in planning new offices and selecting office equipment, while a greater 36% feel they should have a say. The most popular way for employees to have an input is through a representative committee of employees, supervisors and senior executives.

The architects and interior designers interviewed in this study feel that designers should have a say, but many also feel that a committee of different types of employees should be included in office planning decisions.

Most business executives support the role of design professionals in the planning process, but more often feel that employee input should come through supervisors and department heads than feel a representative committee would be appropriate.

Despite the fact that over 60% of the business executives interviewed indicate that they use design consultants on at least some of their office planning projects, relatiavely few office workers are aware that design professionals have a say in office planning, and relatively few feel that their role is important.

Although they are unaware of the extent to which office workers ignore their role in office planning, half of the architects and interior designers interviewed feel there is not enough communication with the users of the offices they plan.

Perceived effects of employee participation in office planning. Of those who feel that their participation in office planning would have an effect on their surroundings, 31% volunteer that it would make them more comfortable, and that they would be more pleased with surroundings in which they had some choice. Another 25% say that employees would feel that their opinions were valued, and would feel more involved. A high 20% volunteer that their workspaces would be better organized and more efficient as a result of their input, and another 20% feel that their involvement would have a favorable effect on their productivity. Another reason, say 17%, is that they are closer to the situation, and know what is needed.

In contrast, the very small 2% who feel the effect might be unfavorable feel that way because too many different opinions and ideas might be involved.

Table VI-1

Q.16a: If you and your work group had a lot of say in planning the office spaces and equipment with which you work, all in all, do you feel this would have a good effect on your office environment, a bad effect, or not much of an effect at all?

Office Workers				
		Job Level		
(Number of respondents)	Total (1047)	Management (221)	Supervisory (205)	Regular Worker (597)
	%	%	%	%
Good effect	72	71	73	72
Bad effect	2	3	3	2
Not much effect at all	21	22	21	21
Not sure/no answer	4	4	2	5

Table VI-2

Q.16b: What do you think (good/bad) effect would be? Anything else? (Base: Good or bad effect in Q.16a)

(Number of respondents)	Total (779)	Management (163)	Supervisory (157)	Regular Worker (444)
	%	%	%	%
Good				
More comfortable/pleased with surroundings they choose	31	25	30	33
Employees would feel opinions/contributions were valued, feel involved	25	30	20	24
Work space could be organized/utilized for highest efficiency	20	19	19	20
Increase in productivity	20	22	21	18
Employees know what is needed, are closer to situation	17	16	16	18
Happier employees	11	10	11	11
More relaxed atmosphere/environment/working conditions	10	9	12	10
Good for morale	8	10	5	7
Better attitudes, employees would feel better	7	4	8	8
Employees would select most useful equipment, and learn to operate and care for it	6	6	4	7
Workers would take more responsibility, pride in work	4	4	4	4
Employees would not criticize/complain if they had a say	2	3	2	2
Better physical health; less strain, tension, tiredness	1	1	1	1
Bad				
Too many different opinions/ideas	3	3	3	2
Any other answer	2	3	2	2
Do not know	2	1	2	1

Employee perception of management opposition to participation in office planning.

Table VI-3

Q.16c: Do you think the management of your company or organization would strongly favor, somewhat favor, somewhat oppose, or strongly oppose letting employees have a say in planning office spaces and selecting office equipment?

	Office Workers			
		Job Level		
(Number of respondents)	Total (1047)	Management (221)	Supervisory (205)	Regular Worker (597)
	%	%	%	%
Favor	44	56	40	41
Oppose	50	40	54	52
Not sure/no answer	6	4	6	8

Note: "Favor" is the sum of "strongly favor" and "somewhat favor"; "oppose" is the sum of "somewhat oppose" and "strongly oppose."

What office workers would fight for.

A final indication of how strongly office workers feel about this issue is in the fact that 75% of office workers would fight very or somewhat hard for a more pleasant office environment in the face of management opposition, 79% would fight for a safer office environment, and 73% would fight for a better work surface, chairs, storage space and other office furniture.

Higher percentages would fight for a greater say in deciding how their jobs would be carried out, for better tools and equipment, and for a greater say in deciding how much work they do, but fewer would fight for rewards for increased productivity than would fight for a better office environment.

Table VI-4

Q.17: If the management of your company or organization were opposed to it, how much do you feel you personally would fight for (READ FIRST ITEM) — very hard, somewhat hard, not very hard, or not at all?

	Office Workers			
		Job Level		
(Number of respondents)	Total (1047)	Management (221)	Supervisory (205)	Regular Worker (597)
	%	%	%	%
Greater say in deciding how your job would be carried out				
Very/somewhat hard	84	86	91	80
Not very hard/not at all	14	10	8	17
Better tools and equipment for your job				
Very/somewhat hard	83	87	90	79
Not very hard/not at all	14	10	9	18
Safer office environment				
Very/somewhat	79	80	85	77
Not very hard/not at all	17	16	12	19
Greater say in deciding how much work you would do				
Very/somewhat hard	76	78	83	72
Not very hard/not at all	21	17	16	25
More pleasant office environment				
Very/somewhat hard	75	73	80	75
Not very hard/not at all	22	23	19	22
Better work surfaces, chairs, storage space and other furniture for your job				
Very/somewhat hard	73	74	80	71
Not very hard/not at all	24	23	18	27
Rewards for more or better work produced in the same period of time				
Very/somewhat hard	70	73	76	67
Not very hard/not at all	26	20	22	29

How office workers feel about participation in work-related decisions.

A very high 91% of office workers feel that it is very or somewhat important for them to have a say in "deciding how the job will actually be carried out, the methods you'll use, and so on," and a high 81% now feel that they have a lot of say or some say in these decisions.

An almost equally high 88% feel that "arranging your work surface, chair, and storage space in the way that seems best for your job and the way you work" is important, and 72% feel they now have a voice in this.

"Recommending the type of work surface, chair, storage space and other office furniture that would be best for the job" is important to a smaller but still substantial 73%, and a much smaller 40% feel they now have a voice in this, leading to the assumption that a third of office workers would like to have more of a voice in specifying the office furniture they use.

"Recommending the tools, equipment, and other materials that would be best for your job" is important to a greater 86%, while only 64% feel they now have a say in this kind of recommendation.

"Deciding the kinds of wall decorations, plants and personal items that will be in your personal workspace" is important to 69%, and 64% feel they currently have a voice in this.

"Deciding how much work should be done" is important to 82%, a smaller 62% feel they now have a voice in this.

"Deciding when the working day will officially begin and end" is important to a lesser 61%, but even fewer 38% feel they have some say in this.

Table VI-5

Q.14a: Now, I'd like you to consider your work group — that is, the people you work with most of the time to get your job done. How much of a say do you and your work group have in the following — do you and your work group have a lot of say, some say, not too much say, or no say at all in (ITEM)?

Q.14b: How important is it for you personally to have a say in (ITEM) — very important, somewhat important, hardly important, or not at all important?

	Office Workers				
	Importance Of Having A Say		Extent of Present Participation		
(Number of respondents: 1047)	Very Important or Somewhat Important	Hardly Important or Not At All Important	Lot of Say or Some Say	Not Too Much Say or No Say At All	Difference Between Importance And Extent of Participation
	%	%	%	%	%
Deciding how the job will actually be carried out, the methods you'll use, and so on	91	9	81	19	+10
Arranging your work surface, chair, and storage space in the way that seems best for your job and the way you work	88	13	72	27	+16
Recommending the tools, equipment, and other materials that would be best for your job	86	13	64	36	+22
Deciding how much work should be done	82	18	62	37	+20
Recommending the type of work surface, chair, storage space, and other office furniture that would be best for your job	73	27	40	59	+33
Deciding the kinds of wall decorations, plants and personal items that will be in your personal workspace	69	30	64	36	+ 5
Deciding when the working day will officially begin and end	61	39	38	62	+23

Who *does* plan offices?

Office workers perceive that a number of individuals and groups now plan offices and select office equipment for their organizations. A 47% plurality of office workers see supervisors and/or department heads as having some say in these decisions, 35% perceive that an office administrator has a voice, 34% think that design professionals who work for their organizations contribute, and 31% think design professionals from outside make some of the decisions. In contrast, only 19% say that employees now have some say, and a slim 10% say that a committee that includes employees, as well as supervisors and executives, helps make these decisions.

The business executives involved in office decision-making for the Fortune 1300 corporations cite design professionals from outside the company or organization (75% say this group has a say), supervisors and department heads (68% say they have some say in their companies), design professionals working for the company (65%), office administrators (63%), the president or chairman (59%), and a committee of senior executives (52%). About a third (37%) say employees have a say; 18% mention a representative committee of employees.

The experience of design professionals is that most organizations use designers from outside (79%) or in-house design staff (61%); majorities also feel that the president or chairman, a committee of senior executives, and supervisors/department heads have some say. A higher percentage of design professionals (31%) than of business executives (18%) say that a joint committee of employees, supervisory and executive personnel participates, and somewhat fewer (24%) feel employees have a say.

Table VI-6

Q.5a: Now I'd like to talk about the people who plan offices and select office equipment. From your experience, which of the following people or groups have some say in planning new offices in your organization (most organizations)?

(Number of respondents)	Business Executives (209)	Architects and Designers (225)	Office Workers (1047)
	%	%	%
Architects, interior designers, or office planners from outside the company or organization	75	79	31
Supervisors and/or department heads	68	54	47
Architects, interior designers, or office planners who work for the company or organization	65	61	34
An office administrator	63	50	35
The president or chairman of the company	59	58	27
A committee of senior executives	52	54	28
Employees	37	24	19
A joint committee representing employees, supervisors, and senior executives	18	31	10
The president or chairman's spouse	10	27	5
All (vol.)	1	11	1
Other	9	4	1
None	-	-	2
Not sure/no answer	-	-	7

Who *should* plan offices?

While 19% of office workers feel that employees in their organizations now have some say in planning new offices, a greater 36% feel they should have some say. And while 10% believe that a committee of different kinds of employees now has a voice in this planning, a much higher 42% feel a representative committee should have some say.

Design professionals tend to agree, with 24% feeling employees should have a say, and 41% feeling that a committee of regular workers, supervisory personnel, and management is an appropriate way to get employee input. However, higher percentages of design professionals, not surprisingly, feel architects and designers both from outside the organization and in-house should have a voice.

Similar to the design professionals, 27% of corporate office decision-makers feel that employees should have some say (as opposed to the higher 37% who say employees now have a voice). However, 24% of business executives vs. 41% of design professionals think that a committee is an appropriate decision-making group. Instead, greater majorities of these business executives feel that designers from outside and in-house and that supervisors/department heads should have input.

Table VI-7

Q.5b: Which of these persons or groups do you personally feel should have a say in planning new offices for most organizations?

(Number of respondents)	Business Executives (209)	Architects and Designers (225)	Office Workers (1047)
	%	%	%
Supervisors and/or department heads	57	39	38
Architects, interior designers, or office planners from outside the company or organization	54	81	20
Architects, interior designers, or office planners who work for the company or organization	53	56	23
An office administrator	44	31	20
The president or chairman of the company	37	34	14
A committee of senior executives	37	33	12
Employees	27	24	36
A joint committee representing employees, supervisors, and senior executives	24	41	42
The president or chairman's spouse	4	2	1
All (vol.)	3	4	2
Other	6	2	-
None	-	1	-
Not sure/no answer	-	-	3

Who influences an office plan?

Recognizing that final arbitration in any planning process is necessarily in the hands of one individual or group, both executive groups and office workers were asked who they feel now has the most influence in their own or in most organizations. Business executives, design professionals, and office workers all perceive that the president or chairman of the company usually has the most influence.

Almost as many of the design professionals interviewed in this study feel that, as a group, design consultants have the most influence, but both business executives and office workers perceive the influence of in-house designers, senior executives, and supervisors to be greater than that of outside design consultants.

It should be noted, however, that a sizable 14% of office workers are not sure who has the most influence.

Table VI-8

Q.5c: Which *one* of these persons or groups would you say usually has the most influence on a final office plan?

(Number of respondents)	**Business Executives (209)**	**Architects and Designers (225)**	**Office Workers (1047)**
	%	%	%
The president or chairman of the company	31	34	20
Architects, interior designers, or office planners who work for the company or organization	20	7	10
A committee of senior executives	19	9	14
An office administrator	10	5	13
Supervisors and/or department heads	9	5	17
Architects, interior designers or office planners from outside the company or organization	6	31	5
A joint committee representing employees, supervisors, and senior executives	1	1	3
The president or chairman's spouse	-	2	1
Employees	-	1	1
All (vol.)	-	-	-
Other	3	-	1
None	-	1	1
Not sure/no answer	-	2	14

Who *should* influence office plans?

Distinct attitudinal differences arise once more on the question of who should have the most influence on an office plan. Business executives feel that in-house design professionals should have the most influence; design professionals feel that design consultants from outside should have the most influence, and office workers feel that a joint committee of employees, supervisors, and executives should have the most influence.

The president or chairman of the company is not generally felt to be the most appropriate arbitrator. A slight 14% of business executives, 11% of design professionals and 7% of office workers feel that the president or chairman should have the most influence.

Surprisingly, only 12% of office workers feel that employees should have the most influence on an office plan; both business executives and design professionals anticipate that most office workers would want employees to have the most influence. More office workers, however, would prefer a committee that would include their representatives, or, secondarily, would like to see supervisors and/or department heads have the most influence.

Design professionals correctly estimate the success with office workers of the idea of a representative committee, but business executives somewhat underestimate the popularity of this concept. Both groups underestimate the influence of a committee of senior executives with office workers, and design professionals seriously overestimate the influence of outside designers with office workers.

Table VI-9

Q.5d: And which *one* of these persons do you personally feel should have the most influence?

(Number of respondents)	Business Executives (209)		Architects and Designers (225)		Office Workers (1047)	
	%	Rank	%	Rank	%	Rank
Architects, interior designers, or office planners who work for the company or organization	23	1	5	5	6	6
A committee of senior executives	16	2	5	5	4	7
The president or chairman of the company	14	3	11	3	7	4
An office administrator	14	3	4	7	7	4
A joint committee representing employees, supervisors, and senior executives	11	5	12	2	30	1
Supervisors and/or department heads	11	5	6	4	20	2
Architects, interior designers, or office planners from outside the company or organization	5	7	48	1	3	8
Employees	2	8	2	8	12	3
The president or chairman's spouse	-	9	1	9	-	9
All (vol.)	-		-		1	
Other	4		1		-	
None	-		-		-	
Not sure/no answer	-		1		9	

Perception of office employees' feelings about who should most influence an office plan.

Table VI-10

Q.5e: Which one person or group do you think most office employees would feel should have the most influence on a final office plan?

(Number of respondents)	Perception Of Business Executives (209)		Perception Of Architects and Designers (225)		Actual Choice Of Office Workers (1047)	
	%	Rank	%	Rank	%	Rank
Employees	29	1	30	1	12	3
A joint committee representing employees, supervisors, and senior executives	23	2	30	1	30	1
Supervisors and/or department heads	14	3	11	3	20	2
A committee of senior executives	8	4	2	8	4	7
Architects, interior designers, or office planners who work for the company or organization	7	5	2	7	6	6
The president or chairman of the company	6	6	5	5	7	4
An office administrator	5	7	3	6	7	4
Architects, interior designers, or office planners from outside the company or organization	1	8	11	3	3	8
The president or chairman's spouse	-	9	-	9	-	9
All (vol.)	-		-		1	
Other	1		1			
None	-		-		-	
Not sure/no answer	4		4		9	

Frequency of company retaining outside professional design and/or planning consultant for office planning projects.

Table VI-11

Q.F2c: How often does your company retain outside professional design and/or planning consultants in its office planning — on all projects, on most projects, on some projects, or on no projects?

(Number of respondents)	Business Executives (209)
	%
All projects	5
Most projects	23
Some projects	60
No projects	11
Not sure	1

Architects' and designers' perceptions of adequacy of design input from office employees.

Table VI-12

Q.8d: All in all, do you feel that the input office planners and designers receive from the users of the interiors they plan is adequate, or not?

(Number of respondents)	Architects and Designers (225)
	%
Adequate	42
Not adequate	50
Not sure	7

Q.8e: Why do you say the input they receive from users is not adequate? Any other reason? (Base: Feel input is not adequate or not sure.)

(Number of respondents)	Architects and Designers (113)
	%
Don't receive what we need to know, criteria given not valuable	41
Employees are not asked/allowed to give ideas and needs; don't want to make waves	24
Clients not realistic about functional interior design, ask for too much	18
Lack of communication between designers and people who use office	17
Varies; depends on who gives input	7
Usually just left up to us, it's our specialty	2
Lack of studies on usage to meet the needs of workers	2
Any other answer	5
Do not know	3

Recommendations of architects and designers to improve user input in office design.

Table VI-13

Q.8f: If you had one recommendation to make to improve input from users, what would that be? (Base: Feel input is not adequate or not sure.)

(Number of respondents)	Architects and Designers (113)
	%
Find out what employees/office users need, want; more direct contact between employees and designers	62
Client should listen to our ideas, not get fixed ideas too early, be open to suggestions	13
Be realistic about changes to be made	10
Stay with same person/committee throughout process; don't shuffle designers around from person to person	6
Have outside consultants/authorities conduct studies (time and motion usage, etc.)	6
Accurate/correct information, decisions to make working easier, environment functional	2

Observation:

One reason for design professionals feeling more strongly than business executives that a committee including employee representatives should have a voice or even the most influence in office planning is here — most design professionals simply feel that they now have too little contact with the employees who will ultimately use the facilities they plan.

Chapter VII

The Future of the Office.

A. Obectives:

Since the office has been subject to rapid growth and relatively dramatic change, it is generally felt that office design and planning is in a new era. It is therefore important to explore what corporate office decision-makers and design professionals feel are the most important office design and planning issues today, and what will be the issues ten years from now. In this chapter, shifts in criteria for updating office facilities and changing office plans are explored, important areas of controversy are asked about, and, since the adoption of open plan offices continues to be widely debated, that issue is explored in some depth. Office workers, moreover, are asked about their understanding of the open plan, and their feelings about likely changes in their jobs and in their offices in the next five years.

B. Summary:

Growth of the office *work force, internal reorganization,* increased reliance on office *electronics, productivity,* and rising *energy* and *construction* costs are felt by office planners and designers to be the most significant factors in the updating of office facilities over the next ten years.

Similarly, in the criteria for developing specific office plans, more business executives feel that "suitability for electronic, telecommunications and data processing needs" will gain in importance than any other criterion. Design professionals more often choose "energy efficiency," but are otherwise in agreement over the five most important criteria, which also include: "employee productivity," "adaptability to changes in the work force," and "overall functioning." Significantly, however, 12% of designers volunteer that acceptance by employees of new design trends, particularly more open spaces and more flexible partitioning, will be another increasingly important consideration.

A substantial *94%* of business executives interviewed say that their companies have already *invested in more computer terminals and electronic* typing, filing, printing and copying equipment to increase productivity, and a unanimous *100% say they are likely to do so* in the next ten years.

A large 78% also feel it is likely that their companies will implement a "study of exactly what people do on the job and reorganization of what they do so that the work flows smoothly from person to person and from department to department," and a smaller 69% majority say their companies have already conducted such workflow studies. This, it should be remembered, was one measure that majorities of business executives, design professionals and office workers all agreed would be very likely to increase productivity.

"Cutting down on the amount of *noise* and *distraction*" is considered likely to be implemented by *73%*;"rearranging offices" so that workers work closer with those they most often need to communicate with is considered likely by 72%; and a smaller 42% say it is likely that less separation between employees, management, and supervisors will occur over the next ten years. A high 70% will likely commence or continue studying specific office furniture needs, and 55% consider it probable that employees will be given a greater say in the way their jobs and work areas are organized.

Both business executives and designers agree that the *most important issue* in office design and planning *today* is employee *productivity,* and over 60% in each group feel that this issue will gain in importance over the next ten years.

Another issue that is now important, is likely to gain in importance, and which executives and designers agree will be one of the two most controversial issues ten years from now is "energy-conscious design."

Other issues likely to be "hot" ten years from now are "democracy in the workplace," "status differentiation in office design," and, most importantly, with links to all these other controversial issues, the debate over the "conventional vs. the open plan" office.

A very substantial 87% of business executives and 91% of design professionals feel that there will be a growing trend toward constructing new office buildings that will accommodate the open plan office, and nearly as many — 77% of business executives and 84% of design professionals — feel that the open plan will be more prevalent than conventional offices ten years from now.

In fact, on average, a slightly greater percentage of the total office facilities of the companies of these business executives are estimated to be open plan than to be conventional/traditional at present, and the design professionals interviewed on average had more projects that fell into one of the three open plan categories in 1977 than projects they felt were described by the conventional office drawing.

The strongest benefits of the open plan, according to both business executives and design professionals, are "the ability to change office layouts with a minimum of cost" and the "ability to change office layouts with a minimum of dislocation."

The most serious drawbacks are seen to be the "loss of status to people formerly in traditional private offices" and "loss of conversational privacy."

Design professionals are consistently more positive and less negative about the open plan than are business executives involved with office planning. A high 75% of designers and a smaller 57% of business executives feel that the benefits of the open plan outweigh its drawbacks; 28% of business decision-makers and a smaller 13% of designers feel that the drawbacks are more serious.

While majorities of both business executives and design professionals are familiar with the term "open plan," a substantial 61% majority of office workers are "not at all" familiar with the term. Moreover, the percentage of office workers whose definitions of the open plan match those of business planners and designers — "an open area, no walls or partitions, etc." — is a small 26%.

And, although they do see that it is likely they will be using new electronic or data processing equipment on the job, will be learning new skills, and probably see their offices moved to new locations in the next five years, by a 66-23% majority, office workers do not feel that it is likely that they will move from a traditional office type to an open plan. Overall, there is little indication that office workers are prepared for this kind of change. This finding, in combination with the fact that office planners do perceive loss of privacy to some office workers to be a drawback to the open plan, indicates again that *resistance to the open plan must be reckoned with.*

The following charts illustrate the influences that will effect office plans within the next ten years.

Factors that will contribute most to decisions to update in office facilities in next 10 years.

Table VII-1

Q.2b: Which 2 or 3 of these factors do you feel will contribute most to these kinds of decisions in the next ten years?

	Business Executives (209)	**Architects and Designers (225)**
	%	%
Expansion of office work force	55	32
Reorganization within the company of personnel assignments and/or departmental relationships	41	19
Change in type of spatial needs due to increased or new reliance on electronic and data processing equipment	29	35
Desire to increase work output of office employees	21	21
Rising construction costs	19	35
Rising cost of heating and air conditioning of office space	18	41
Need for more flexible office layouts	16	22
Need for better communication between departments	16	14
Desire for more pleasant surroundings for employees	14	14
Availability of new types of office systems	11	30
Need for more space per employee	10	6
Rising cost of lighting office space	7	18
Need for more effficient storage space	5	3
Need for more accessible storage space	4	3
Reduction of office work force	4	4
All (vol.)	-	-
None	1	-
Not sure/no answer	2	5

Other factors that will become more important in decision to modernize office facilities in next 10 years.

Table VII-2

Q.2c: Looking ahead to the next 10 years, what other factors, if any, do you foresee will become more important in the decision to modernize office facilities?

(Number of respondents)	Business Executives (209)	Architects and Designers (225)
	%	%
Technology: need space for computers/ electronic gear/new office systems	22	24
Expansion, internal and external growth	17	3
High energy costs, heating, lighting, air conditioning	13	14
Flexibility of more work zones, ability to adapt space for different functions	9	13
Employee morale: mental/psychological considerations, considering individual	8	17
Better physical conditions for employees, i.e., lighting, handicapped climate control, etc.	7	14
High cost of construction/modernization	7	19
Desire to increase employee output/ productivity/efficiency	7	17
Energy conservation	7	11
More employees, increased number of employees	5	2
Location of company, inner city vs. suburban locale	5	7
Decreasing space, making most of limited space	4	10
Need more space per employee	3	2
Adaptive reuse, trend toward restoration and renovation of existing buildings	3	9
Government regulations	3	2
Corporate image: company desire to present a modern/tasteful/quality image	2	5
High cost of renting office space	1	5
Transportation alternatives, auto vs. mass transit	1	-
Scheduling and time sharing: flexitime, 3-4 day work weeks	-	4
Lessened number of employees	-	1
Availability of materials, types of materials available	-	4
Any other answer	4	5
None/no others	21	14
Do not know/no answer	4	1

Importance of criteria for developing office plans in the next 10 years.

Table VII-3

Q.3d: Which 2 or 3 of these criteria do you feel will gain most in importance for developing office plans in the next 10 years?

(Number of respondents)	Business Executives (209)		Architects and Designers (225)	
	%	Rank	%	Rank
Suitability for electronic, telecommunications, and data processing needs	29	1	42	2
Overall functioning	26	2	27	3
Effect on employee productivity	25	3	18	5
Energy efficiency	24	4	45	1
Adaptability to changes in the work force	21	5	17	6
Effect on employee satisfaction	19	6	15	8
Adaptability to new equipment needs	15	7	21	4
Overall space	15	7	6	14
Adaptability to internal reorganization	14	9	16	7
Effect on workflow	11	10	6	14
Adaptability and suitability to specific job requirements	10	11	8	12
Overall appearance	10	11	9	10
Effect on communication between departments	9	13	4	13
Effect on management satisfaction	5	14	4	18
Suitability of office furniture for job requirements	5	14	7	13
Effect on employee health and safety	4	16	8	11
Acoustics	3	17	5	12
Lighting	2	18	10	9
Impression on business visitors	2	18	4	18
Fire safety	1	20	6	14
Wiring	-	21	1	21
All (vol.)	-		1	

Other criteria important for developing office plans in the next 10 years.

Table VII-4

Q.3e: What other criteria, if any, do you feel will become important for specific office plans in the next 10 years?

(Number of respondents)	Business Executives (209)	Architects and Designers (225)
	%	%
Ease of change, flexibility, interchangeability	13	11
Costs, cost of improvement	11	20
Employee productivity/efficiency, maximum results from employees	7	10
Introduction of new technology, effect of electronic equipment	7	11
Company growth	7	-
Overall employee needs/morale/satisfaction	6	8
Location in regard to transportation costs to and from work	6	2
Energy, availability of energy	6	9
Job task relationships, work requirements	3	4
Disposability of furniture and partitions, acceptance by employees of open design	3	12
Communications requirements	2	5
Decentralization of industry, more office buildings in more locations	1	-
Facilities for employees' physical fitness	1	1
Overall appearance/image	1	2
Flexible hours/time shifts	-	2
Lighting	-	4
Acoustics	-	3
Any other answer	8	6
None	41	32

Changes in the workplace over the next 10 years.

A very substantial 94% of the 209 business executives of the Fortune 1300 corporations interviewed in this study say that their companies have already invested in more computer terminals and electronic typing, filing, printing and copying equipment; and all of the remaining 6% feel that this will be true of their companies over the next decade.

The measure considered most likely to increase productivity, "studying exactly what people do on the job and reorganizing what they do so that the work flows smoothly from person to person and from department to department," is considered likely to be undertaken by 78% of the business executives who have not yet done so, and has already been undertaken by a 69% majority.

"Cutting down on the amount of noise and distraction" is considered a likely change by a majority; 78% have already seen their companies institute this effort. Another 72% whose companies haven't yet rearranged offices for better interpersonal and interdepartmental working relationships feel they will do so over the next ten years, but a substantial 90% say their companies have already devoted attention to this kind of change.

A 57% majority say that they have changed office design so that employees, supervisors and management are less closed off from one another, but less than half of those feel that their companies would be likely to institute such change in the next ten years.

Insuring that employees have the proper office furniture by studying their tasks and needs on the job has been undertaken by 62%, and a high 70% of the rest feel it is likely their companies will commence studying office furniture needs in the future.

A 64% majority say their companies have already given employees more say in how their duties and work areas are organized, and a majority of the rest feel it is likely they will do so. Forty-seven percent have already instituted some type of flexible hours plan; another 52% have not considered it a likely future plan.

Changes in the workspace that have been or are likely to be made. (Base: asked only of business executives.)

Table VII-5

Q.4a: Recently, companies have been making changes in the workplace in order to improve working conditions, increase productivity, or cut down on waste and energy costs. Has your company implemented a policy to (ITEM), or not?

(If has not yet implemented policy:)

Q.4b: How likely do you feel it would be for your company to (ITEM) in the next 10 years — very likely, somewhat likely, or hardly likely at all?

	Business Executives			
(Number of respondents: 209)	**Company Has Implemented**		**Likely To Implement In Next Ten Years**	
	%	Rank	%	Rank
Invest in more computer terminals and electronic typing, filing, printing, and copying equipment	94	1	100	1
Rearrange the office so that people who usually work together are located closer to one another and people who only occasionally or never work together are further apart	90	2	72	4
Cut down on the amount of noise and distraction in the office	78	3	73	3
Study exactly what people do on the job and reorganize what they do so that the work flows smoothly from person to person and from department to department	69	4	78	2
Give employees a greater say in how their duties and personal work areas are organized	64	5	55	6
Study exactly what people do on the job and then make sure that their work surfaces, chairs, lighting, and storage space are what they need to do their jobs	62	6	70	5
Change the office design so that employees, supervisors, and management are less closed off from one another	57	7	42	8
Allow some employees to come in earlier and leave earlier and others to come in later and leave later according to the type of job they have and the hours they prefer	47	8	52	7
Let all employees share equally in the profits of the company	35	9	19	10
Let all employees share in the profits of the company with the percentage of share based on how well they do their jobs, as rated by their supervisors	12	10	19	10
Give employees 8 hours' extra pay for every full month they have no late or sick days	6	11	27	9

The most important and controversial issues in office design and planning.

Both business executives and design professionals agree that the most important issue in office design and planning today is employee productivity. A very high 84% of design professionals and a substantial 69% of business executives feel this issue is very important.

Not too far behind in importance are "energy-conscious design" and "increased attention to the design of the workflow in the office." Somewhat surprisingly, "effect of office lighting on employee vision" is considered by business executives to be more important than workflow, and office safety falls in between the two.

"The personal preferences of top management" are currently considered important by a majority of design professionals, and a strong 47% of business executives. "Status differentiation in office design" is considered important to somewhat fewer — 44% of designers and 36% of business executives.

The debate over conventional as opposed to open plan office layouts is considered important to about a third of both executive groups, as is increased paperwork due to government requirements.

However, majorities of business executives and design professionals feel that a number of these issues will become more important over the next ten years:

- Gaining most in importance will be "word processing pools that reduce the need for private secretaries," which 57% of designers and 55% of business executives feel will gain in importance, raising it from the ranks of currently less important issues;
- "Energy-conscious design" moves from second to first rank, with over 80% of each executive group feeling it will gain in importance;
- About two-thirds of the executive groups feel that employee productivity will not only maintain a top rank place, but will also gain in importance;
- Sixty percent of each executive group feel that increased attention to workflow will gain as an important issue in office design and planning;
- While a relatively small 33% of designers and 36% of business executives feel it will gain in importance, "democracy in the workplace" is third and fourth most frequently chosen as the most controversial issue in the next ten years;
- "Status differentiation" is also felt likely to be a "hot" issue ten years from now, and
- The debate over the open plan office vs. the conventional office is felt by only 41% of each executive group to be likely to gain in importance as an issue, but is named tops as an issue likely to be most controversial ten years from now.

Table VII-6

Q.11a: How important an issue do you feel *(ITEM)* is in office design and planning today — very important, somewhat important, hardly important, or not important at all?

Q.11b: Do you feel *(ITEM)* will be a more important issue in office design and planning in the next 10 years, a less important issue, or about as important as it is now?

Q.11c: If you had to select one, which one of these issues would you select as the most controversial one for office design and planning 10 years from now?

	Feel Very Important Issue In Office Design Today				**Feel Will Be Most Important in 10 Years**				**Most Controversial Issue 10 Years From Now**			
	Business Executives		**Architects and Designers**		**Business Executives**		**Architests and Designers**		**Business Executives**		**Architects and Designers**	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Employee productivity	69	1	84	1	65	2	69	2	7	5	9	4
Energy-conscious design in new offices	63	2	72	2	81	1	85	1	16	2	17	1
Effect of office lighting on employee vision	58	3	65	4	38	8	54	5	1	12	-	13
Safety in the office environment	55	4	42	7	38	8	39	9	-	13	1	12
Increased attention to the design of the workflow in an office	52	5	67	3	60	3	60	3	5	7	7	6
Personal preferences of top management	47	6	55	5	18	12	19	13	5	7	5	8
Status differentiation in office design	36	7	44	6	13	14	12	14	13	3	9	4
Conventional vs open plan offices	34	8	35	9	41	6	41	7	22	1	17	1
Increased paperwork due to government requirements	27	9	39	8	45	5	46	6	3	10	7	6
Word processing pools that reduce the need for private secretaries	23	10	26	11	55	4	57	4	6	6	3	10
More women in management	23	10	20	13	40	7	41	7	3	10	2	11
Prevalence of backstrain among office employees	19	12	27	10	17	13	29	11	-	14	-	13
Democracy in the workplace	16	13	22	12	36	10	33	10	11	4	11	3
More blacks and other minorities in management	16	13	11	14	31	11	27	12	5	7	5	8

The open plan office — is it an important issue?

While the debate over the open plan office and whether, or in what cases, it should replace the conventional office continues, it is important to re-emphasize that about a third of business executives and of design professionals feel it is an important issue now, but more feel it will gain in importance over the next ten years. It is considered, along with energy consciousness, likely to be one of the two most controversial design issues ten years from now.

One reason for their belief in its increasing importance lies in the fact that 87% of business executives and 91% of design professionals feel there will be a growing trend toward construction of office buildings to accommodate the open plan office, and nearly as many — 77% of business executives and 84% of design professionals — feel that open plan offices will be more common than conventional plan offices ten years from now.

This is not too surprising when it is remembered that 3 in 10 office workers now identify their offices as some form of open plan, as opposed to the 4 in 10 who identify their offices as conventional. Moreover, looking at the average estimates of the business executives and designers interviewed in this study, 41% of the business executives' company office facilities are now described by one of the three forms of open plan, and 47% of the offices planned in 1977 by the design professionals fit that description.

Prevalence of the open plan over the next 10 years.

Table VII-7

Q.10n: Over the next 10 years, do you feel there will be a growing trend toward the construction of office buildings that can easily accommodate open plan offices, or not?

(Number of respondents)	Business Executives (209)	Architects and Designers (225)
	%	%
Will be growing trend	87	91
Will not be	9	6
Not sure	4	3

Q.10m: Do you feel that open plan offices will come to be more common than the conventional plan in offices 10 years from now, or not?

(Number of respondents)	Business Executives (209)	Architects And Designers (225)
	%	%
Will be more common in 10 years	77	84
Will not be more common in 10 years	21	14
Not sure	2	2

The open plan — benefits and drawbacks.

By far the strongest advantages of the open plan, according to business executives and design professionals, are the "ability to change office layouts with a minimum of cost" and, secondarily, the "ability to change office layouts with a minimum of dislocation."

In general, architects and designers are consistently more positive about the advantages of the open plan, but majorities of business executives as well can see an advantage to the open plan for its:

- "Increased energy efficiency,"
- "Suitability for users of data and word processing equipment,"
- "Increased privacy for employees who previously had none,"
- "Adaptability to different physical requirements,"
- "Adaptability to different office functions and job requirements," and
- "Increased employee productivity."

On the other hand, 88% of business executives feel that the "loss of status to people formerly in traditional private offices" posed by the open plan is a drawback, and 43% feel it is a serious drawback. A somewhat smaller 32% of design professionals feel this is a serious drawback. "Loss of conversational privacy" is considered serious by another 43% of business executives, and a smaller 29% of designers.

Majorities of both business executives and design professionals consider the following considerations drawbacks as well:

- "Loss of visual privacy,"
- "Suitability only for certain types of buildings,"
- "Employee resistance,"
- "Difficulty of making wiring systems flexible enough,"
- "Suitability only for certain types of employees," and
- "Initial high cost of installation."

These last four, however, are not frequently considered "serious" drawbacks.

All in all, 57% of business executives and 75% of design professionals feel that the benefits of the open plan office outweigh its drawbacks, with 28% of the corporate office planners and 13% of design professionals feeling that the drawbacks are more serious.

Office types in the experience of business executives and designers: Summary table.

Table VII-8

Q.10a-e: Here are some schematic drawings of different types of offices. Since most companies' total office spaces contain a variety of office types and the terminology describing them can vary, for purposes of classification, we will call them Type A, Type B, Type C, Type D and Type E. If you had to estimate, about what percentage of your company's total office facilities (the office facilities planned by your firm in 1977) would you describe as (TYPE)?

(Number of respondents)		Business Executives (209)		Architects and Designers (225)	
		Mean Percentage of Total Office Facilities:		Mean Percentage Planned In 1977	
		%		%	
Type A "Conventional"		33		44	
Type B "Pool"		20		4	
Type C "Landscape"	Open plan	11	41	16	47
Type D		13		17	
Type E		17		14	

Advantages of the open plan.

Table VII-9

Q.10j: These are some characteristics which advocates of the open plan find to recommend it over a conventional office plan. Do you feel (ITEM) is a strong advantage of the open plan, somewhat of an advantage, or not an advantage at all of the open plan?

(Number of respondents)	Business Executives (209)	Architects and Designers (225)
	%	%
Ability to change office layouts with a minimum of cost		
Strong advantage	82	88
Somewhat of an advantage	15	10
Not an advantage at all	3	1
Not sure/no answer	-	1
Ability to change office layouts with a minimum of dislocation		
Strong advantage	69	72
Somewhat of an advantage	24	25
Not an advantage at all	6	2
Not sure/no answer	1	1
Increased energy efficiency through task lighting		
Strong advantage	29	44
Somewhat of an advantage	48	41
Not an advantage at all	20	14
Not sure/no answer	3	1
Suitability for users of data and word processing equipment		
Strong advantage	20	24
Somewhat of an advantage	46	37
Not an advantage at all	34	29
Not sure/no answer	-	9
Increased privacy for employees who previously have had none		
Strong advantage	33	28
Somewhat of an advantage	40	47
Not an advantage at all	26	24
Not sure/no answer	-	2
Adaptability to different individual users with different physical requirements		
Strong advantage	31	46
Somewhat of an advantage	53	36
Not an advantage at all	13	17
Not sure/no answer	2	1
Adaptability to different office functions and job requirements		
Strong advantage	41	67
Somewhat of an advantage	49	26
Not an advantage at all	10	6
Not sure/no answer	-	2
Increased employee productivity		
Strong advantage	21	40
Somewhat of an advantage	42	39
Not an advantage at all	31	17
Not sure/no answer	5	4

Drawbacks of the open plan.

Table VII-10

Q.10k: Here are some characteristics of the open plan some critics of the open plan find objectionable. Do you feel (ITEM) is a serious drawback, somewhat of a drawback, or not a drawback at all to the open plan?

(Number of respondents)	Business Executives (209)	Architects and Designers (225)
	%	%
Loss of status to people formerly in traditional private offices		
Serious drawback	43	32
Somewhat of a drawback	45	43
Not a drawback at all	12	24
Not sure/no answer	-	-
Loss of conversational privacy		
Serious drawback	43	29
Somewhat of a drawback	46	50
Not a drawback at all	11	20
Not sure/no answer	-	2
Loss of visual privacy to people formerly in traditional private offices		
Serious drawback	33	23
Somewhat of a drawback	46	49
Not a drawback at all	21	27
Not sure/no answer	-	3
Suitability only for certain types of buildings		
Serious drawback	22	20
Somewhat of a drawback	44	42
Not a drawback at all	32	36
Not sure/no answer	2	3
Employee resistance		
Serious drawback	16	14
Somewhat of a drawback	56	48
Not a drawback at all	27	36
Not sure/no answer	1	4
Difficulty of making wiring systems flexible enough		
Serious drawback	13	21
Somewhat of a drawback	38	43
Not a drawback at all	44	34
Not sure/no answer	5	3
Suitability only for certain types of employees		
Serious drawback	13	11
Somewhat of a drawback	57	52
Not a drawback at all	29	36
Not sure/no answer	2	3
Initial high cost of installation		
Serious drawback	11	11
Somewhat of a drawback	49	40
Not a drawback at all	37	46
Not sure/no answer	3	5

Open plan: weighing benefits and disadvantages.

Table VII-11

Q.10l: All in all, do you personally feel that the benefits of the open plan outweigh its disadvantages, or that its disadvantages outweigh its benefits?

(Number of respondents)	Business Executives (209)	Architects and Designers (225)
	%	%
Benefits outweigh disadvantages	57	75
Disadvantages outweigh benefits	28	13
Equal benefits and disadvantages	10	9
Not sure	5	4

Familiarity with the open plan.

While majorities of both business executives and design professionals consider themselves familiar with the term "open plan," and, in fact, consider themselves "very" familiar with the term, a majority of office workers are "not at all" familiar with it. Management-level office workers are a little more familiar with it — by a closer 50-46% they are not familiar with "open plan" — but a 58% majority of supervisory-level workers are not at all familiar with it, and 66% of regular workers don't recognize this term in the context of office design.

Moreover, even a 58% majority of those who identify their offices as one of the three types assigned to the open plan category in this survey feel that they are not at all familiar with the term.

The most common connotations of the term "open plan" for professionals are "open office area, no physical partitions/walls, working in a large open space;" "a versatile office plan, nothing set, all subject to change, flexible;" and "modular systems, 'soft' walls, partitioning combined with furniture." Majorities of executives in both groups who consider themselves familiar with the term use definitions that fit into that first category of response.

A 73% majority of office workers who are familiar with the open plan (26% of all office workers) respond that the term means to them "an open office area, no physical partitions, all work in a large space." However, another 10% give it a meaning in the context of communications between employees and management, more democracy in the workplace, "freedom to hold meetings, give opinions," and 6% believe it connotes more freedom from supervision and increased individual responsibility on the job.

Familiarity with the term "open plan."

Table VII-12

Q.9a: I'd like to ask you how familiar you personally are with the term "open plan" when used in the context of office design — very familiar, somewhat familiar, or not familiar at all?

			Office Workers						
				Job Level			Type of Office		
(Number of respondents)	**Business Executives (209)**	**Architects and Designers (225)**	**Total (1047)**	**Management (221)**	**Supervisory (205)**	**Regular Worker (597)**	**Conventional (405)**	**Pool (148)**	**Open Plan (318)**
	%	%	%	%	%	%	%	%	%
Very familiar	66	87	14	22	14	10	14	13	16
Somewhat familiar	30	10	22	26	24	20	24	15	24
Not familiar at all	4	3	61	50	58	66	58	70	58
Not sure	-	-	3	2	3	4	4	3	2

Executives' and designers' understanding of the term "open plan."

Table VII-13

Q.9b: What does the term "open plan" mean to you? (PROBE) Anything else?

(Number of respondents)	Business Executives (199)	Architects and Designers (217)
	%	%
Open office area, no physical partitions/ walls, all work in large space	56	55
A versatile plan, nothing set, all subject to change, flexible	36	46
Modular systems, soft wall system partitioning combined with furniture	34	31
Best utilization of space, efficient work stations	14	14
Open communications between employees and management, functional relationships	8	10
Open yet retains feeling of own work area, private area	10	8
Lack of privacy, no private areas	12	4
Long visual paths, high visibility	5	4
Facilitates grouping of people according to functional and communicational needs	4	3
Improvement of office workers' surroundings functionally and aesthetically	7	-
Any other answer	3	3

Office workers' understanding of the term "open plan."

Table VII-14

Q.6f: What does the term "open plan" mean to you, in your own words? (PROBE) Anything else? (Base: Very or somewhat familiar with term.)

(Number of respondents)	Office Workers (376)
	%
Open office area, no physical partitions; all work in large space	73
Open communications between employees and management; freedom to hold meetings for better working conditions, give opinions, etc.	10
Freedom to plan own work routine; each employee responsible for own work without supervision	6
Free access to management; all doors open to employees	3
Employees may set up own work hours, free to come and go	3
A versatile plan; nothing set, all subject to change	3
How office is organized, goal and objectives of company	2
Any other answer	6
Nothing	1
Do not know	3

Observation:

While offices that have few or no permanent walls, characterized instead by flexible partitioning and by more openness, and that often use office furniture to separate the workspace of one office worker from another are becoming increasingly prevalent, the term "open plan" has not become familiar to office workers. Certainly, the ability to define what is in essence professional terminology (and terminology that can cover a confusing variety of office types at that) is not as important as a working familiarity with what an open plan office means in terms of productivity, economy, or even the most obvious issue, privacy. But the fact that only 26% of office workers are able to put into words a term that has come to imply a dramatic change in office planning across the country is an indication that many office workers are not really aware of the significance of that change, or, more importantly, of why they may themselves be involved in it.

Observation:

Office workers as a group are, as previously noted, a remarkably mobile group, learning new skills, changing jobs, and fairly accustomed to changes in office location. The amount of change to which they have become adjusted in the past five years has given them a certain ability to predict changes in the next five years, especially in the area of the use of new electronic and data processing equipment, in having the locations or designs of their offices changed, in learning new skills and taking on new duties. Nevertheless, a relatively small percentage are aware of the extent to which energy consciousness will affect office design (one of the prime advantages of the open plan office) and a majority simply do not foresee a radical change from a traditional office to an open plan office. (This perception holds as true for office workers in conventional or pool offices as it does for office workers who are now identified as working in one form or another of the open plan.)

These findings, in combination with the finding that the term "open plan" has no immediate meaning for most office workers, are an indication of the reasons why the debate over the open plan vs. the conventional office is likely to become the hottest issue in office planning ten years from now. Overall, there is little indication that office workers are prepared for arguments on either the advantages or drawbacks of the open plan; and at this stage, it can easily be predicted that loss of privacy would become the focal complaint of any office worker faced with a change for which he or she was unprepared.

Changes anticipated by office workers over the next five years.

Substantial majorities of office workers feel that in the next five years it will be very or somewhat likely for them to experience changes:

- That require learning new skills;
- In the location of their personal workspaces or offices;
- In the kind of tasks or duties they perform on the job; and
- Of jobs within their organization or company.

Smaller majorities feel it is likely that they will use electronic or data processing equipment, will have a promotion with a move to a better office, or will see a new layout or design for the office in which they work.

Pluralities feel it is likely that they will change jobs from one company or organization to another, and that they will see changes in office operations to save energy.

Finally, by a striking 66-23%, a majority of office workers do ***not*** feel that it is likely that they will change from a traditional to an open plan office.

Table VII-15

Q.7b: In the next five years, how likely do you feel it will be for you to experience each of these changes — very likely, somewhat likely, hardly likely, or not at all likely?

	Job Type				
(Number of respondents)	**Total (1047)**	**Executive/ Manager/ Supervisor (245)**	**Profes-sional (319)**	**Secre-tarial (121)**	**Clerical (274)**
	%	%	%	%	%
Changes in your job that require learning new skills					
Very/somewhat likely	70	70	74	67	66
Hardly/not at all likely	26	27	23	31	30
Changes in the kind of tasks or duties performed on your job					
Very/somewhat likely	67	68	70	65	63
Hardly/not at all likely	30	29	27	32	32
Change in the location of your personal workspace or office					
Very/somewhat likely	66	73	73	58	58
Hardly/not at all likely	29	24	24	37	36
Change of jobs within an organization or company					
Very/somewhat likely	60	64	67	46	51
Hardly/not at all likely	36	33	30	50	41
Use of new electronic or data processing equipment					
Very/somewhat likely	55	51	58	50	55
Hardly/not at all likely	40	45	38	43	37
Promotion with a move to a better office					
Very/somewhat likely	54	58	59	46	47
Hardly/not at all likely	41	37	36	49	45
Redesign or new layout for the office in which you work					
Very/somewhat likely	51	57	54	44	47
Hardly/not at all likely	43	39	41	50	46
Change of job from one organization or company to another					
Very/somewhat likely	49	47	56	45	45
Hardly/not at all likely	46	51	39	52	47
Change in office operations to save energy					
Very/somewhat likely	46	51	45	44	42
Hardly/not at all likely	44	39	45	42	47
Change in the type of office you work in from a traditional plan to an open plan — that is, a plan with few or no fixed walls dividing spaces					
Very/somewhat likely	23	22	24	20	24
Hardly/not at all likely	66	67	66	73	64

Appendix.

Technical Details and Methodology.

A. Fieldwork

All the data for this survey were collected from in-person interviews with the different samples by Harris interviewers, under the control and supervision of the Harris Field Director and Regional Supervisors. Fifteen percent of all interviews were validated by telephone to ensure that the interviews had been honestly and accurately carried out.

All interviews with the executive groups were carried out by executive interviewers belonging to the Harris executive field force, under the control of the Executive Field Director.

Interviews were conducted in late July and early August of 1978.

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*The Harris national sample is based on updated census information on the population of each state, and on the population living in urbanized and more rural areas throughout the country. The sample is stratified to ensure that it represents the actual proportion of those living in different regions and in different size of place areas.

**The selection of an ultimate sampling unit (a cluster of adjacent households) is achieved by multi-stage cluster sampling. Within each of sixteen strata (four regions within four size of place categories) first states, then counties, and then minor civil divisions are selected proportional to census estimates of their respective populations. 200 of these sampling units (sample points) were used for this study.

B. The Sample Design

*1. **The cross-section of office workers*** was based on the Harris national sample*, a national cross-section of the adult civilian population of the United States, excluding Alaska and Hawaii. Using this national sample to locate households, approximately 75 households in each of 200 sample points** were contacted through the use of random digit dialing to obtain the names, exact addresses and telephone numbers of adults who had worked in offices for at least six months, not necessarily at their current jobs; and were currently working for organizations employing 25 or more office workers on their staffs.

Interviewers in the field were provided with the names, addresses and telephone numbers of qualifying individuals, within their assigned areas, and were instructed to contact and interview these office workers in their homes.

The resulting sample is a representative cross-section of adults in the United States (excluding Alaska and Hawaii) who currently work full-time in offices with 25 or more employees. A more complete description of the characteristics of the sample is found in the preface of this report.

*2. **The executive samples*** were chosen using a systematic random interval sample, where all of the corporations or design firms in the directories used had an equal chance of being selected. Members of the Harris executive field staff then contacted each selected corporation or design firm to obtain the name of the person there who has decision-making responsibility for office planning and design.

The *business executives* are representative of the persons with the "greatest influence on office design and planning, including but not limited to office furniture selection" in the 1978 Fortune magazine directory of 1300 U.S. industrial, commercial banking, life insurance, financial, retailing, transportation and utility companies.

The *architects and interior designers* represent the contract interior firms listed as the top 75 in dollar volume by Interiors magazine in January of 1978, screened for office interior work, and member firms of the American Society of Interior Designers and the American Institute of Architects who engage in contract office interior design. To the extent possible, this sample was evenly divided between interior design and architectural firms.

C. Sample Description:

*1. **Who are the office workers?*** The cross-section of office workers interviewed in this study are, by definition, full-time employees in offices with 25 or more employees.

They are well educated — all have at least some high school, and a plurality are college graduates. They have relatively high household incomes, with the median combined household income for 1977 being approximately $21,500. They come from all over the country, but somewhat fewer are in the South, in towns and in rural areas. They are fairly evenly divided into three age groups — 18 to 29 (only adults 18 and over were interviewed for this study), 30 to 39, and 40 or over. They are, by a slight majority (56-44%), female, and by a large majority (89-10%) white.

A plurality have worked for six or more years at their current place of work. A majority classify themselves as "regular workers," and of the remaining 40%, half classify themselves as "senior management" or "management" and half as "supervisory" level workers. More specifically, when they are classified from their job descriptions into types of jobs, most are classified as "support" workers — secretarial, clerical, and technical/operative workers — but a substantial 30% are "professionals" with jobs that require detailed execution and technical imput such as engineers, computer programmers, accountants, or purchasing agents. Another sizable job classification is the executive /managerial/supervisory group, the 24% of office workers whose central job is to manage and direct.

The service sector — health and education, social services, business and professional services, entertainment and recreational services — accounts for 24% of these office workers. The four "industries" employing the most office workers in the sample are manufacturing (18%), government (17%), financial (banking, insurance, real estate) (14%), and health and education (12%).

*2. **Affirmative Action in the Office:*** Another characteristic of office workers in this survey important to a discussion of differences in attitudes is the uneven distribution of male and female office workers across job categories. Especially important to note is that 97% of secretaries and 84% of clerical workers are female, while majorities of managerial and professional workers are male.

Interestingly, office workers at the supervisory level are split evenly by sex, which is one indication of some of the change beginning to work its way into the office, particularly in the industries where women office workers predominate.

A much stronger indication of shifts in the status quo of the sexes in the office is the attitudinal evidence presented in the body of this report.

Characteristics of the sample of office workers.

Table C-1

	Number in Sample	Percentage of Sample
	#	%
Total office workers	**1,047**	**100**
Region		
East	301	29
Midwest	326	31
South	184	18
West	236	23
Size of place		
Cities	437	42
Suburbs	360	34
Towns/rural	250	24
Age		
18-29	351	34
30-39	308	29
40 and over	386	37
Education		
High school graduate	297	28
Some college	356	34
College graduate	389	37
Income		
Under $10,000	112	11
$10,000-$14,999	187	18
$15,000-$24,999	349	33
$25,000 and over	365	35
Sex		
Male	458	44
Female	589	56
Race		
White	934	89
Non-White	106	10
Length of employment in current job		
Less than 1 year	150	14
1 year to 5 years, 11 months	423	40
6 years or more	453	43
Size of company or organization (number of employees)		
100 or less	157	15
101-500	137	13
501-5,000	262	25
Over 5,000	203	19
Job level[1]		
Management	221	21
Supervisory	205	20
Regular worker	597	57
Job type[2]		
Executive/managerial	142	14
Supervisory	103	10
Professional	319	30
Support	451	43
Secretarial	121	12
Clerical	274	26
Technical/operative	56	5
Type of industry[3]		
Manufacturing	193	18
Government	178	17
Health and education	125	12
Communications and public services	100	10
Business and professional services	96	9
Insurance and real estate	83	8
Banking and investment	66	6
Retail	73	7
Construction	31	3
Transportation	21	2
Mining	19	1
Entertainment and recreational services	10	1
Other	63	6

Notes: Subgroups may not add to 1,407 (100%) due to some non-response.

1. Respondents were asked to classify themselves on one of four general job levels: senior management, management (these were combined for "management" category), supervisory, and regular worker.

2. From detailed job descriptions, Louis Harris and Associates staff classified each respondent into one of six categories. Examples of each are: *executive/managerial* — director, officer, division head, department head; *supervisory* — group leader (directs support group); *professional* — scientist, engineer, accountant, salesman, architect, lawyer, purchasing agent, marketing manager, customer services, computer programmer (involves detailed execution and technical input); *support* — secretarial (secretary, receptionist) *clerical* (mail clerk, clerk typist, stenographer typist, *technical/operative* (detail draftsman, machine operator).

3. Louis Harris and Associates staff classified responses to the question "what kind of business or field is your job in" into these categories, based on the major industry classifications of the Standard Industrial Code.

Distribution of male and female office workers across job categories and industries.

Table C-2

		Job Type				Job Level			Industry						
(Number of respondents)	Total (1047)	Executive/ Manager/ Supervisor (245)	Professional (319)	Secretarial (121)	Clerical (274)	Management (221)	Supervisory (205)	Regular Worker (597)	Manufacturing (193)	Government (178)	Health and Education (125)	Communications and Public Services (100)	Business and Professional Services (96)	Insurance and Real Estate (83)	Banking and Investment (66)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Male	44	62	65	3	16	75	50	29	58	47	21	39	61	28	42
Female	56	38	35	97	84	25	50	71	42	53	79	61	39	72	58

3. ***The corporate office decision-makers and office design professionals interviewed in this survey:*** Random samples of over 200 of the Fortune 1300 corporations and of architectural and interior design firms engaging in contract office design work were drawn by Louis Harris and Associates.

In the Fortune 1300 corporations, the persons with the greatest influence on office design and planning, including but not limited to office furniture selection, were interviewed.

Within each architectural or design firm, a project director for office interiors was interviewed. The sample of design professionals was evenly divided between architectural and interior design firms.

Both executive groups have a high degree of professional involvement with the analysis of office space, development of office plans, decision-making with respect to recommending that office space be expanded or remodeled, cost analysis, selection of office space and selection of office furnishings.

A 40% plurality of the design professionals interviewed describe the planning of new office spaces as their "main job," and additional 20% describe their main job as "architectural or building design." A smaller 31% of the corporate executives interviewed describe the planning of new office spaces as their main job; 26% describe it as facility maintenance or policy-making in regard to equipment; 11% are personnel or employee relations executives, and 11% are in administration.

Most of the architects and interior designers interviewed are the "owner, president, chief executive officer, or partner" in their firms (59%); 38% of the corporate executives are managers, 14% vice presidents, and 11% directors in their companies.

The median age of the business executives is 47, and the median age of the design professionals is a comparable 44. A substantial 89% of the business executives are male; 11% female. A greater percentage of the design professionals are female (22%), but a majority (78%) are male.

A substantial 20% of the Fortune 1300 corporations represented by the business executives are estimated by them to employ over 25,000 employees, but 13% estimate that their companies employ 2,000 or fewer. A 40% plurality estimate that 25% or less of their total work force are office workers; 20% estimate that more than half are office workers.

A 58% majority of the design professionals' firms have 10 or fewer employees in total, and most of these firms (46%) have no employees who are engaged solely in office interior work. For a 52% majority, 25% or less of their business is in office interiors, but 29% do more than 50% of their business in offices. A 47% plurality did under $500,000 worth of business in 1977, but 32% did $1 million or more.

Characteristics of the executive samples: job description.

Table C-3

	Business Executives		Architects and Designers	
	Number in Sample	Percentage of Sample	Number in Sample	Percentage of Sample
	#	%	#	%
Total	**209**	**100**	**225**	**100**
Job Description				
Specific office planning/design functions in which involved:				
Analysis of what kind of office space is needed	166	80	181	81
Development of specific office plans	165	79	200	90
Decision of need for new or remodeled office space	161	77	165	74
Analysis of cost effectiveness	161	77	175	79
Study of current needs for office space	159	76	171	77
Selection of office equipment and furnishings	153	74	186	84
Selection of office space	148	71	146	65
Analysis of employee work-flow and communications	124	60	168	76
Decision to build new buildings	96	46	98	44
Design of new office buildings	x	x	141	64
Selection of consultants:				
Interior designers	150	72	x	x
Planning consultants	134	64	x	x
Architects	116	56	x	x
Engineers	113	54	x	x

Characteristics of the executive samples: main job.

Table C-4

	Architects and Designers	
	Number In Sample	Percentage of Sample
	#	%
Total	**225**	**100**
Job Description (main job:)		
Architecture and interior design firms		
Planning of new office spaces	89	40
Architectural/building design	44	20
Interior design	27	12
Supervision of designers	26	11
Office administration	22	10
Client contact/coordination	15	7
Business development	13	6
Chief architect/designer	4	2
Specifications	4	2
Any other answer	6	3

Characteristics of the executive samples: main job.

Table C-5

	Business Executives	
	Number In Sample	Percentage Of Sample
	#	%
Total	**209**	**100**
Job Description (main job:)		
Corporations		
Planning of new office spaces	64	31
Facility maintenance or policy-making in usage and type of equipment	55	26
Personnel/employee relations	22	11
Administration	22	11
Construction/building operations	11	5
Communication	10	5
Office operations	7	3
Budget	7	3
Legal/counsel	5	2
Real estate	5	2
Trouble shooter	3	1
Engineering	2	1
Planning/new business	2	1
Assistant to President	2	1
Any other answer	17	8
Percentage of company's total office facilities over which respondent has jurisdiction		
1-25%	77	37
26-50%	29	14
51-75%	25	12
76-99%	16	8
100%	47	23

Characteristics of the executive samples: position.

Table C-6

	Business Executives Number In Sample	Business Executives Percentage In Sample	Architects And Designers Number In Sample	Architects And Designers Percentage In Sample
	#	%	#	%
Total	**209**	**100**	**225**	**100**
Architecture and Interior Design Firms				
Position In Organization:				
Owner/president/chief executive officer			103	46
Partner			30	13
Vice President			22	10
Manager/director of interior design			20	9
Interior designer			15	7
Associate			14	6
Architect/architectural designer			10	4
Project designer			3	1
Expeditor			2	1
Any other answer			5	2

Position In Organization: Corporations

	Business Executives Number In Sample	Business Executives Percentage In Sample
	#	%
Manager (office services/ building/operations)	79	38
Vice President	30	14
Director (administration/ administrative services)	22	11
Engineer (chief or facilities)	13	6
Planning and design coordinator	12	6
Director (facilities/building and construction)	9	4
Purchasing agent	8	4
Director (corporate real estate)	7	3
Interior designer	4	2
Architect	4	2
Corporate counsel	3	1
Corporate/public relations	3	1
Any other answer		

Characteristics of the executive samples: age and sex.

Table C-7

	Business Executives Number In Sample	Business Executives Percentage of Sample	Architects and Designers Number in Sample	Architects and Designers Percentage of Sample
	#	%	#	%
Total	**209**	**100**	**225**	**100**
Age				
21-29	7	3	22	9
30-39	60	28	63	28
40-49	57	27	68	30
50 and over	85	40	72	32
Median age (in years)	47		44	
Sex				
Male	187	89	175	78
Female	22	11	50	22

Characteristics of executive samples:Fortune 1300 corporations.

Table C-8

	Business Executives Number In Sample	Business Executives Percentage Sample
	#	%
Total	**209**	**100**
Characteristics of Respondent Corporations*		
Number of employees in respondent's organization		
0-2,000	28	13
2,001-5,000	53	26
5,001-10,000	38	18
10,001-25,000	39	19
Over 25,000	41	20
Not sure	10	5
Percentage of employees who are office workers		
25% or less	83	40
26-50%	67	32
Over 50%	42	20
Not sure/no answer	15	7
Total square footage of company's office facilities		
100,000 sq. ft. or less	24	12
100,001 to 500,000	41	20
501,000 to 1 million	22	10
1 million to 5 million	35	17
Over 5 million sq. ft.	6	3
Any other answer/not sure/no answer	81	38

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*Respondents' estimates.

Characteristics of executive samples: Architecture and interior design firms.

Table C-9

	Architects and Designers	
	Number In Sample	Percentage Of Sample
	#	%
Total	**225**	**100**
Characteristics of Respondent Firms*		
Number of employees in respondent's organization		
10 or fewer	130	58
11-100	76	34
Over 100	17	7
Not sure/no answer	2	1
Number of employees engaged solely in contract office design		
1 or 2	48	22
3-9	45	20
10-15	11	5
More than 15	15	6
None	104	46
Not sure/no answer	2	1
Percentage of business in contract office interiors		
25% or less	116	52
26-50%	35	16
More than 50%	65	29
Not sure/no answer	9	3
Smallest office project undertaken in 1977 (Square footage)		
1-250 square feet	42	19
251-500 square feet	29	13
501-1,000 square feet	47	21
1,001-2,000 square feet	42	19
2,001-10,000 square feet	43	19
Over 10,000 square feet	13	6
Any other answer/not sure/no answer	9	4
Largest office project undertaken in 1977 (Square footage)		
5,000 square feet or less	36	16
5,001-10,000 square feet	24	11
10,001-20,000 square feet	30	13
20,001-100,000 square feet	68	30
Over 100,000 square feet	58	26
Any other answer/not sure/no answer	9	4
Total dollar volume business in office interiors for 1977		
Under $500,000	105	47
$500,000-$1 million	33	15
$1 million-$5 million	44	20
$5 million or over	27	12
Not sure/no answer/refused	16	7

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*Respondents' estimates

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